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ARS-44-110-1
(Part 5)
December 1961



TABULATIONS OF DHIA RECORDS OF
DAUGHTERS OF AI SIREs

IN THE
UNITED STATES

(Part 5)
(Pages 1 - 371, incl.)



Growth Through Agricultural Progress

Agricultural Research Service
United States Department of Agriculture

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TABULATIONS OF DHIA RECORDS OF DAUGHTERS OF AI SIRES IN THE UNITED STATES 1/

In this part of the AI Tabulations is Table 16. The contents of the table is indicated by the title of the table listed in the index on the back of the cover page.

These tabulations include the DHIA lactation records of all AI daughters of all sires reported to the Dairy Cattle Research Branch, AHRD, in AI service from 1939 through January 1, 1961, and the lactation records of 461,100 daughters of 7,618 AI sires reported to the Dairy Cattle Research Branch, AHRD, prior to May 1, 1961.

All production records used in these tabulations consist of 305-day lactation records standardized to a mature-equivalent twice-a-day milking basis. When more than one lactation record were available for a cow, each record was standardized and the average of all standardized records used to represent the production capacity of the cow.

Compilation of contemporary (herd-mate) and yearly-herd-average data are dependent on herd codes to assemble such data for each sire. Because a uniform system of identifying DHIA herds by code has been in operation for only a few years, lactation records and herd-average data reported in earlier years are not identified by herd codes. Tabulations for the older sires listed, therefore, may include little or no herd-mate or yearly-herd-average data.

1/ AI Tabulations 1961 are in 5 parts (parts 1 and 3 are divided into 3 sections), published by Dairy Cattle Research Branch, Animal Husbandry Research Division, Agricultural Research Service.

ARTIFICIAL-BREEDING ORGANIZATIONS IN THE UNITED STATES

DHIA Proved-Sire Records, of sires in AB service, indicate by code number the last AB organization in which a sire is used. Following is a complete list of AB organizations that have operated in the United States (according to reports received in the Dairy Cattle Research Branch). Some no longer exist, but sires used in such organizations may be proved or reproved, in which case reference will be made to the organization in the proved-sire record.

STATE		ORGANIZATION		STATE		ORGANIZATION	
Name	Code	Name		Name	Code	Name	
Maine	11	02	Androscoggin Valley ABA	Wisconsin	35	12	Trempealeau Co-op. ABA
Maine	11	03	Androscoggin Valley & Central Maine ABA	Wisconsin	35	13	Tri County ABA
Maine	11	04	Central Maine ABA	Wisconsin	35	05	*Tri State Co-op. ABA
Maine	11	01	*Maine Breeding Co-op. Inc.	Wisconsin	35	14	University of Wisconsin ABA
New Hampshire	12	01	New Hampshire ABA	Wisconsin	35	15	Vernon Co. Co-op. ABA
New Hampshire	12	03	*New Hampshire-Vermont ABA	Wisconsin	35	16	Wisconsin Experimental Breeding Project ABA
New Hampshire	12	02	Willow Spring ABA	Minnesota	41	19	Aitkin Co. ABA
Vermont	13	03	Agri. Experimental Sta. ABA	Minnesota	41	05	Barnum ABA
Vermont	13	01	Central Vermont ABA	Minnesota	41	06	Central Minnesota ABA
Vermont	13	02	Vermont Co-op. ABA Inc.	Minnesota	41	04	*Consolidated Breeders Co-op. ABA
Massachusetts	14	02	Bristol Co. Farm Bureau Inc. ABA	Minnesota	41	07	Floodwood Co-op. ABA
Massachusetts	14	01	Massachusetts ABA Inc.	Minnesota	41	20	Friendly Valley ABA
Rhode Island	15	01	Rhode Island Co-op. ABA Inc.	Minnesota	41	14	Land O'Lakes Creameries Inc. ABA
Connecticut	16	01	Connecticut ABA Inc.	Minnesota	41	01	*Minnesota Valley ABA
Connecticut	16	02	Fairfield-New Haven ABA	Minnesota	41	02	Minnesota Valley and Southern Minnesota ABA
Connecticut	16	03	Litchfield Co. ABA	Minnesota	41	08	North Minnesota ABA
Connecticut	16	04	*New England Selective ABA	Minnesota	41	21	North St. Louis Co. ABA
New York	21	03	Broome Co-op. ABA Inc.	Minnesota	41	03	Northwest Minnesota ABA
New York	21	02	Broome Tioga Co-op. ABA Inc.	Minnesota	41	22	Pine Co. ABA
New York	21	04	Cortland ABA Inc.	Minnesota	41	10	Roseau Co. Creameries ABA
New York	21	01	*New York Artificial Breeders Co-op. Inc.	Minnesota	41	17	Southern Minnesota Breeding Federation ABA
New York	21	05	Roundout ABA	Minnesota	41	18	Swink AB Corp.
New York	21	06	Seneca Co-op. ABA Inc.	Minnesota	41	11	Tilney Farms ABA
New York	21	07	Sullivan Co. ABA	Minnesota	41	16	Watowan Truman Co-op. Creamery ABA
New Jersey	22	07	Burlington Co. ABA	Minnesota	41	13	West St. Louis Co. ABA
New Jersey	22	04	Morris Co. Co-op. ABA Inc.	Minnesota	41	12	Willard Co-op. ABA
New Jersey	22	05	New Jersey Experiment Station ABA	Iowa	42	10	Crawford Co. ABA
New Jersey	22	03	*New Jersey Co-op. ABA Inc.	Iowa	42	02	*Eastern Iowa ABA Inc.
New Jersey	22	06	Plainsboro ABA	Iowa	42	04	Humbolt Co-op. ABA
New Jersey	22	01	*Sussex Co-op. ABA Inc.	Iowa	42	08	*Iowa Breeders Co-op. ABA
New Jersey	22	08	Walker-Gordon ABA	Iowa	42	03	Iowa Dairy Genetics Inc. ABA
Pennsylvania	23	03	Clarion Co. ABA	Iowa	42	05	Linn Co. Co-op. ABA
Pennsylvania	23	02	*First Pennsylvania Co-op. ABA	Iowa	42	06	North Iowa Co-op. ABA
Pennsylvania	23	06	Golden Genes ABA Inc.	Iowa	42	01	Northwest Iowa Co-op. ABA
Pennsylvania	23	07	*Lehigh Valley Co-op. ABA	Iowa	42	09	Palo Alto Co-op. ABA
Pennsylvania	23	04	*NEPA Co-op. ABA	Iowa	42	07	Western Iowa ABA
Pennsylvania	23	08	*Southeastern Pennsylvania Co-op. ABA	Missouri	43	09	AVA ABA
Pennsylvania	23	05	*Western Pennsylvania Co-op. ABA	Missouri	43	01	East Missouri ABA
Pennsylvania	23	01	Zimmerman Dairy Farm ABA	Missouri	43	02	*M. F. A. ABA
Ohio	31	01	*Central Ohio Breeding Association	Missouri	43	03	Mid West ABA
Ohio	31	05	Northeast Ohio Co-op. ABA	Missouri	43	04	Missouri Dairy Breeders ABA
Ohio	31	02	*Northern Ohio Breeding Association Inc.	Missouri	43	08	Osage Farms ABA
Ohio	31	06	Northwest Ohio ABA	Missouri	43	05	Southwest Missouri ABA
Ohio	31	03	Trumbull-Ashtabula ABA	Missouri	43	06	Trenton ABA
Ohio	31	04	Western Ohio ABA	South Dakota	46	01	South Dakota Co-op. ABA
Indiana	32	12	Bottema Farms ABA	Nebraska	47	09	Central Nebraska Non-stock Co-op. ABA Inc.
Indiana	32	03	Elkhart Co. ABA	Nebraska	47	07	Dairy Breeders Enterprise ABA
Indiana	32	04	Harrison ABA	Nebraska	47	03	Douglas Co-op. ABA
Indiana	32	08	Harry Rosenbury ABA	Nebraska	47	04	Lancaster Non-stock Co-op. Dairy ABA
Indiana	32	05	Indiana ABA	Nebraska	47	01	*Nebraska Dairy Breeders ABA
Indiana	32	13	Indianapolis Co-op. ABA	Nebraska	47	05	Norfolk Non-stock Co-op. ABA
Indiana	32	06	Indiana State Institutions ABA	Nebraska	47	06	University of Nebraska ABA
Indiana	32	02	*John A. Newman and Sons ABA	Kansas	48	01	*Kansas ABA
Indiana	32	07	LaPorte Co-op. ABA Inc.	Delaware	50	01	Delaware Co-op. ABA Inc.
Indiana	32	16	North Benton-Newton-Jasper ABA	Delaware	50	02	New Castle Co-op. ABA
Indiana	32	14	Producers Creamery ABA	Maryland	51	01	Maryland Co-op. ABA Inc.
Indiana	32	09	Ross Farm ABA	Maryland	51	02	*Maryland-West Virginia Co-op. ABA
Indiana	32	18	Southern Indiana ABA	Virginia	52	08	Blue Ridge ABA Inc.
Indiana	32	15	Steuben ABA	Virginia	52	10	Culpeper ABA Inc.
Indiana	32	11	Topeka ABA	Virginia	52	02	Franklin Co. ABA Inc.
Indiana	32	10	Walter H. Ball ABA	Virginia	52	03	Loudoun Co. ABA Inc.
Illinois	33	09	American Dairy Guernsey ABA	Virginia	52	06	North Va. Co-op. ABA Inc.
Illinois	33	04	Central Illinois ABA	Virginia	52	04	Pulaski Co-op. ABA
Illinois	33	03	Curtiss Improved Stud Service Inc.	Virginia	52	09	Shenandoah Valley ABA
Illinois	33	05	Eastern Stephenson ABA	Virginia	52	07	Southeast Virginia ABA Inc.
Illinois	33	06	Inter Co. ABA	Virginia	52	05	Valley of Virginia Co-op. ABA Inc.
Illinois	33	01	*Northern Illinois Breeding Co-op.	Virginia	52	01	*Virginia ABA Inc.
Illinois	33	07	Shelby County ABA	West Virginia	54	01	West Virginia Co-op. ABA
Illinois	33	02	*Southern Illinois ABA	North Carolina	55	04	Forsyth Co. ABA
Illinois	33	08	Tri County ABA	North Carolina	55	01	*North Carolina Inst. Breeders ABA
Michigan	34	04	Grand Valley ABA	North Carolina	55	02	North Carolina State College ABA
Michigan	34	05	Hillsdale ABA	North Carolina	55	03	Southeastern ABA
Michigan	34	01	*Michigan Co-op. ABA Inc.	South Carolina	56	02	*Chester Co-op. ABA
Michigan	34	03	North Kent ABA	South Carolina	56	01	Clemson College ABA
Michigan	34	02	Zeeland ABA	South Carolina	56	03	South Carolina Co-op. ABA
Wisconsin	35	75	*American Breeders Service	Florida	58	01	Broward County ABA
Wisconsin	35	01	*Associated Breeding Service ABA Inc.	Kentucky	61	01	*Kentucky ABA Inc.
Wisconsin	35	02	*Badger Co-op. ABA	Tennessee	63	01	*East Tennessee ABA
Wisconsin	35	18	Central Wisconsin Co-op. ABA	Tennessee	63	04	Maury-Williamson ABA Inc.
Wisconsin	35	20	Clark County ABA	Tennessee	63	02	*Tennessee ABA
Wisconsin	35	07	Clinton Stock Farm ABA Inc.	Tennessee	63	03	*West Tennessee ABA
Wisconsin	35	08	Dane Co-op. ABA	Alabama	64	01	Alabama ABA
Wisconsin	35	09	Dane Iowa Co-op. ABA	Alabama	64	02	Marshall Co. ABA
Wisconsin	35	03	*East Central Co-op. ABA				
Wisconsin	35	19	Langlade Co. ABA				
Wisconsin	35	04	*Piper Brothers Farm ABA				
Wisconsin	35	10	Polk Co. Co-op. ABA				
Wisconsin	35	11	Rock Co. ABA				
Wisconsin	35	06	*Southern Wisconsin Co-op. ABA				

STATE			ORGANIZATION		STATE			ORGANIZATION	
Name	Code	Code	Name		Name	Code	Code	Name	
Mississippi	65	01	Hinds Rankin ABA		Arizona	86	01	Arizona ABA	
Mississippi	65	08	Noxubee Co. ABA		Arizona	86	02	*Eads ABA	
Mississippi	65	06	Mid South ABA		Arizona	86	03	News ABA	
Mississippi	65	02	*Mississippi Co-op. ABA		Utah	87	01	*Cache Valley Co-op. ABA	
Mississippi	65	03	Pike Co-op. ABA		Utah	87	02	Weber Co. ABA	
Mississippi	65	05	South Mississippi Co-op. ABA		Washington	91	08	Clark Co. ABA	
Mississippi	65	07	Tippah Co. Fair and Livestock ABA		Washington	91	02	Colville Valley ABA	
Mississippi	65	04	Tupelo ABA		Washington	91	07	Ed. P. Peterson ABA	
Arkansas	71	01	*Arkansas ABA		Washington	91	01	*Evergreen Northwest Breeders ABA Inc.	
Louisiana	72	01	*Louisiana AB Co-op. Inc.		Washington	91	09	Farwest ABA	
Louisiana	72	02	Northern Louisiana Jersey ABA		Washington	91	03	Mt. Rainier ABA	
Oklahoma	73	01	Eastern Oklahoma ABA		Washington	91	06	Northeast Co-op. ABA	
Oklahoma	73	02	Northwestern Oklahoma ABA		Washington	91	05	Northwest Co-op. ABA	
Oklahoma	73	03	Oklahoma Dairy Breeders ABA		Washington	91	04	Walla Walla Valley Co-op. ABA	
Texas	74	09	Cameron Co. ABA		Oregon	92	02	Multnomah ABA	
Texas	74	08	Hill Co. ABA		Oregon	92	01	*Oregon Dairy Breeders Association	
Texas	74	07	Muenster ABA		Oregon	92	03	Yamhill Co. ABA	
Texas	74	04	North Star ABA		California	93	02	*Adohr Dairy Farms ABA	
Texas	74	02	North Texas ABA		California	93	01	*California Dairy ABA	
Texas	74	05	Rio Vista ABA		California	93	03	*Excelsior ABA	
Texas	74	01	*Texas A & M College ABA		California	93	04	*Golden West ABA Inc.	
Texas	74	03	Texas Tech ABA		California	93	05	*Jessup Breeders	
Montana	81	01	Western Montana ABA		California	93	10	*Pacific Breeders Co-op. Inc.	
Idaho	82	01	Bluffview Farm ABA		California	93	11	Sacramento Co-op. ABA	
Idaho	82	03	New Plymouth ABA		California	93	07	San Pasqual ABA Inc.	
Idaho	82	02	Shamrock ABA		California	93	06	Santa Clara ABA	
Colorado	84	04	Brookridge Farm Dairy ABA		California	93	08	Sonoma Marin Co-op. ABA Inc.	
Colorado	84	01	*Colorado State University ABS		California	93	09	Tulare Co-op. ABA	
Colorado	84	02	North Central Colorado ABA		Puerto Rico	94	01	*Puerto Rico ABA	
Colorado	84	05	Surface Creek ABA		Hawaii	95	03	*Haleakala Dairy Farm ABA	
Colorado	84	03	Willow Springs ABA		Hawaii	95	02	Moanalua Dairy Ltd. ABA	
New Mexico	85	01	New Mexico ABA		Hawaii	95	01	Waimea Dairy ABA	
					Alaska	96	01	*Matanuska Valley ABA	

*Indicates those AB organizations reported in operation January 1, 1961.

STATE CODES

11	MAINE	55	NORTH CAROLINA
12	NEW HAMPSHIRE	56	SOUTH CAROLINA
13	VERMONT	57	GEORGIA
14	MASSACHUSETTS	58	FLORIDA
15	RHODE ISLAND	61	KENTUCKY
16	CONNECTICUT	63	TENNESSEE
21	NEW YORK	64	ALABAMA
22	NEW JERSEY	65	MISSISSIPPI
23	PENNSYLVANIA	71	ARKANSAS
31	OHIO	72	LOUISIANA
32	INDIANA	73	OKLAHOMA
33	ILLINOIS	74	TEXAS
34	MICHIGAN	81	MONTANA
35	WISCONSIN	82	IDAHO
41	MINNESOTA	83	WYOMING
42	IOWA	84	COLORADO
43	MISSOURI	85	NEW MEXICO
45	NORTH DAKOTA	86	ARIZONA
46	SOUTH DAKOTA	87	UTAH
47	NEBRASKA	88	NEVADA
48	KANSAS	91	WASHINGTON
50	DELAWARE	92	OREGON
51	MARYLAND	93	CALIFORNIA
52	VIRGINIA	94	PUERTO RICO
54	WEST VIRGINIA	95	HAWAII
		96	ALASKA

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				AV. YEARLY HERD		
								NO. OAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
000 GUER	198660	MAINE	9	17	5804	5.2	297							
	200363	MAINE	5	8	7007	4.7	325							
	253212	MAINE	2	2	7785	4.6	357							
	598396	MAINE	12	70	12464	3.8	467	2	9	11647	433	2	10669	424
	645901	MAINE	5	20	12230	3.5	429							
	672561	MAINE	6	22	13132	3.6	470							
	734936	MAINE	6	22	11324	3.7	415							
	760769	MAINE	1	1	12280	3.6	447	1	14	10660	402	1	10704	397
	263903	MAINE	7	22	7436	5.2	387	1	7	7583	410	1	8110	436
	354626	MAINE	2	4	6975	5.6	395							
	379461	MAINE	4	11	6155	5.3	327	1	2	7410	349	1	7815	368
	383412	MAINE	2	4	5624	5.4	303							
		NEW HAMPSHIRE	6	15	7905	5.3	415	2	3	8594	441	2	7658	391
		NEW JERSEY	1	2	8710	5.4	469							
	385771	MAINE	2	3	7043	5.3	372							
	401651	MAINE	2	3	9888	4.7	469	1	5	5835	306	1	6616	340
	404365	MAINE	4	7	7299	6.0	438							
		CONNECTICUT	1	3	9837	5.4	528							
001 GUER	250883	MAINE	20	50	7486	5.0	370	6	5	7552	372	2	7551	350
		NEW HAMPSHIRE	1	3	8223	4.8	396							
	262521	MAINE	12	32	7237	5.1	367	7	7	8106	393	1	8238	407
	273136	MAINE	114	292	7572	4.9	370	86	9	8023	376	2	8085	378
	275397	MAINE	7	15	7033	4.8	342	2	7	7323	351	2	7642	364
		CONNECTICUT	1	2	11145	5.3	589	1	13	9085	425	1	8818	425
	282325	MAINE	53	127	7022	4.9	342	2	5	9523	431	3	10747	470
	289535	MAINE	149	321	7045	4.9	346	95	10	8507	388	2	8366	394
		CONNECTICUT	2	6	9405	5.1	476	2	12	9907	495	3	9421	502
	290089	MAINE	4	15	7977	4.8	361							
	299206	MAINE	55	132	6966	4.9	338	9	6	8184	384	2	8182	383
		NEW HAMPSHIRE	1	10	6915	4.7	323	1	41	9340	379	3	8901	372
	319639	MAINE	121	278	7591	5.1	384	97	9	8556	397	2	8646	405
		MASSACHUSETTS	1	4	5575	5.1	287	1	3	5720	252	4	5859	284
		NEW YORK	1	1	6620	5.3	351							
	322295	MAINE	15	35	7404	4.9	359	7	9	8167	391	2	8376	392
		CONNECTICUT	1	3	9490	4.4	412	1	21	9473	465	2	9418	467
		NEW YORK	1	4	10065	4.5	454							
	326163	MAINE	67	139	6656	4.6	319	24	11	8042	374	2	7813	366
		WASHINGTON	1	1	9870	4.4	434	1	7	8790	421			
	332819	MAINE	250	545	8091	5.0	405	227	13	8630	400	2	8672	407
		CONNECTICUT	14	15	9071	4.8	441	13	19	9956	458	1	10275	461
		NEW YORK	1	2	7595	5.2	390							
	336755	MAINE	51	157	7262	4.7	346	23	9	8004	384	2	7912	360
	338561	MAINE	74	162	7388	4.6	341	38	9	8514	410	2	8583	412
		CONNECTICUT	1	1	8610	4.4	379							
	352110	MAINE	11	34	8043	5.0	400	5	6	8098	408	2	8199	419
	352226	MAINE	80	230	7756	5.2	399	57	9	8609	402	2	8527	407
	354788	MAINE	170	324	7175	4.9	353	150	9	8771	406	2	8446	396
		NEW HAMPSHIRE	1	2	6340	4.3	274	1	12	7130	308	2	6884	318
		VERMONT	1	1	8790	4.8	423							
		MASSACHUSETTS	2	7	6517	5.5	358	2	14	7859	354	6	7763	340
		PENNSYLVANIA	1	1	7620	5.2	395	1	10	5980	263	1	6268	296

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
	356002	MAINE	1	3	6870	4.1	282							
	359803	MAINE MASSACHUSETTS	37 2	82 7	8091 8437	4.8 4.6	386 382	11 1	7 60	7875 12060	386 474	2 1	7901 11249	384 451
	365345	MAINE CONNECTICUT	19 1	47 1	7269 4900	4.7 5.1	338 248	12	6	8976	399	2	8477	365
	367486	MAINE	4	9	6753	5.1	341	2	11	8483	345	3	9343	383
	378978	MAINE	18	61	7230	5.1	364	9	7	8326	392	3	7922	380
	378980	MAINE CONNECTICUT	53 1	129 2	7213 7795	4.7 5.0	334 387	22	8	8344	383	2	8258	386
	385485	MAINE NEW HAMPSHIRE VERMONT MISSOURI	143 1 1 2	261 1 2 5	7945 8730 10260 9458	4.8 4.9 5.1 4.8	377 432 517 266	137 2	10 18	8872 9122	415 457	2 3	8826 9219	414 356
	387361	MAINE	31	36	7844	4.9	385	24	9	9982	443	1	9957	444
	388586	MAINE CONNECTICUT	8 1	18 1	10026 15390	5.1 5.5	517 850	1	8	6628	320	3	7514	353
	389088	MAINE MASSACHUSETTS	28 1	65 1	6813 6510	4.9 5.7	330 371	14	11	8426	385	3	8551	402
	389662	MAINE	37	43	8021	4.6	372	34	12	9419	424	1	9844	447
	401267	MAINE	63	103	8091	4.6	369	61	10	8953	415	2	8838	410
	428155	MAINE VERMONT PENNSYLVANIA	109 1 1	213 1 1	7386 7050 9730	5.1 5.6 4.7	375 392 461	92 1	10 8	3552 8900	404 367	2 1	8579 9908	406 419
	437601	MAINE	49	99	7806	4.6	363	47	10	8401	398	2	8639	406
	439591	MAINE	11	21	6808	4.9	333	10	15	8224	381	2	8362	392
	453015	MAINE	8	14	6880	5.2	358	8	11	8895	425	2	8248	395
	466767	MAINE	11	16	8184	4.5	367	9	11	9308	439	2	8964	426
	474239	MAINE	43	51	7639	4.9	376	41	13	9768	446	1	9707	447
	475418	MAINE	17	19	7542	4.6	351	15	13	9622	411	1	9410	400
	478125	MAINE	52	77	8321	4.9	408	50	11	9893	458	1	9604	443
	492104	MAINE	1	2	7325	5.6	403	1	27	8010	374	2	8235	380
	493989	MAINE	15	20	7217	4.9	352	14	13	9011	408	1	9160	415
	504702	MAINE	19	21	9068	4.9	445	19	14	9704	441	1	10420	480
	506733	MAINE	31	35	8214	5.1	411	31	16	9909	448	1	9958	457
	521383	MAINE	6	6	6285	4.6	300	4	8	7348	324	1	9826	447
	522125	MAINE	1	1	1670	4.8	80					1	10955	456
	523029	MAINE	4	4	9855	4.7	453	4	23	10283	460	1	10513	474
	526508	MAINE	2	2	7495	4.3	325	2	19	9685	470	1	9816	482
HOL.	705343	MAINE NEW HAMPSHIRE MASSACHUSETTS CONNECTICUT NEW YORK	9 23 3 1 1	26 57 15 2 1	10629 9136 11010 14370 10010	3.7 3.8 3.8 3.3 4.6	395 344 411 471 476	1 3 2	14 6 75	13526 11701 12502	519 412 481	2 2 4	14568 12037 11986	576 444 472
	743063	MAINE NEW HAMPSHIRE VERMONT NEW JERSEY WISCONSIN	254 3 2 1 1	675 4 5 5 1	10572 12570 9904 13622 9570	3.7 3.6 3.9 3.8 3.8	392 454 384 515 360	75 1	7 2	11371 11020	432 367	2	10786	414
	748046	MAINE NEW HAMPSHIRE VERMONT	110 1 2	346 4 2	11046 11348 15405	3.7 3.5 4.0	410 397 619	23	6	11359	431	2	11143	427
	760679	MAINE NEW HAMPSHIRE CONNECTICUT	74 5 1	197 6 5	11201 12512 10226	3.6 3.6 3.4	405 456 350	31 1	11 5	10594 11148	401 400	1 2	10803 11636	410 429

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE NEW YORK	DAUGHTERS NO.	RECORDS NO.	MILK LB. 9968	TEST PCT. 3.6	FAT LB. 360	305-DAY DAUS. NO.	CONTEMPORARY NO.	MILK LB.	AV. FAT LB.	RECORDS NO.	MILK LB.	AV. FAT LB.
			2	3										
	768460	MAINE	303	689	11631	3.8	441	201	8	11612	446	2	11045	426
		NEW HAMPSHIRE	2	4	10255	3.9	394							
		VERMONT	3	9	10114	3.5	355							
		CONNECTICUT	2	7	12307	3.9	457	1	6	9830	344	1	10824	389
		NEW YORK	1	2	13760	3.8	523							
	783950	MAINE	35	88	11059	3.9	425	11	9	10646	410	2	10216	391
		MASSACHUSETTS	1	1	18140	3.7	671	1	35	13680	522	1	14116	546
		CONNECTICUT	1	6	17148	3.5	602	1	28	11363	497	4	9415	516
		MICHIGAN	1	1	10110	3.5	351							
	785359	MAINE	58	151	10428	3.6	377	9	8	9830	376	2	9450	365
		VERMONT	1	1	10710	4.0	427							
		MASSACHUSETTS	1	6	13968	3.6	506	1	3	13350	495	3	13273	495
	799061	MAINE	53	147	10388	3.8	397	37	8	11261	432	3	10706	415
		VERMONT	2	8	10033	3.3	329							
		MASSACHUSETTS	1	2	16750	4.4	727	1	1	15605	678			
	821505	MAINE	115	250	12143	3.7	450	105	10	11761	456	2	11391	441
		VERMONT	1	3	12730	3.4	426	1	4	12390	494	3	9570	353
	846856	MAINE	529	1058	11938	3.8	450	488	10	11864	454	2	11612	446
		NEW HAMPSHIRE	1	1	12290	3.8	470	1	11	10620	392	1	10061	386
		MASSACHUSETTS	5	10	10937	3.8	423	5	13	10786	416	1	11356	442
		CONNECTICUT	2	12	13010	3.7	473	2	18	14549	539	5	14222	535
		PENNSYLVANIA	1	1	13330	3.2	427							
		NORTH CAROLINA	1	2	11725	4.0	462	1	15	11170	406	1	10322	379
	865912	MAINE	375	837	10983	3.6	418	318	9	11535	443	2	11047	426
		MASSACHUSETTS	1	3	15593	3.5	549	1	15	14037	515	1	14344	516
		RHODE ISLAND	1	2	11375	3.8	425	1	1	11300	415	1	10813	407
	883178	MAINE	2	7	9645	3.5	336	2	2	9487	346	3	11041	449
	897932	MAINE	97	301	10639	3.8	400	43	7	10805	421	2	10593	418
		VERMONT	1	5	8566	3.7	321							
	897933	MAINE	16	40	10049	3.7	370	5	9	10318	376	2	9607	368
		MASSACHUSETTS	1	2	12555	3.8	466	1	4	11495	420			
	899350	MAINE	62	116	9860	3.6	355	12	5	10973	416	2	10009	392
	911290	MAINE	2	2	11515	3.8	431	1	7	13190	494	1	14301	542
	913986	MAINE	52	137	11130	3.6	400	43	9	11427	438	2	10744	419
		NEW HAMPSHIRE	1	2	10020	3.2	321	1	4	10020	356	1	9952	344
		VERMONT	1	4	15948	3.7	592	1	22	17570	649	1	16383	619
	921853	MAINE	218	460	11261	4.0	448	195	11	11742	452	2	11294	440
		MASSACHUSETTS	1	1	9110	3.9	351	1	17	12120	437	1	11194	432
		CONNECTICUT	1	2	12335	3.7	461	1	14	12005	417	2	12437	430
	921857	MAINE	2	2	8980	3.9	351	1	8	6750	265	1	6507	254
	921858	MAINE	211	486	10540	3.8	400	180	9	11337	437	2	10898	423
		VERMONT	1	4	10243	3.4	351							
		RHODE ISLAND	1	1	10240	4.1	421	1	12	10270	387	1	9080	335
		CONNECTICUT	2	7	10751	4.1	433	2	33	10843	449	3	9431	433
	928378	MAINE	383	516	11643	3.8	439	357	12	11995	464	1	12067	468
		NEW HAMPSHIRE	1	1	9990	3.7	370	1	6	9600	363	1	10497	396
		VERMONT	2	3	15113	3.9	583	1	5	12780	499	1	13789	530
		MASSACHUSETTS	3	3	10540	3.6	376	3	11	11920	456	1	12281	470
		RHODE ISLAND	1	1	2630	3.8	100	1	48	10260	406	1	9647	363
	929063	MAINE	23	53	11795	3.8	449	21	10	11303	423	2	10965	423
		NEW HAMPSHIRE	2	2	14855	3.5	521	2	16	13805	542	1	15070	567
	929291	MAINE	9	24	12587	3.5	438	9	7	11351	437	2	10904	426
	931267	MAINE	529	965	11851	3.8	453	494	10	11789	454	2	11428	442
		NEW HAMPSHIRE	3	5	13947	4.1	557	3	9	13947	534	1	12927	496
		MASSACHUSETTS	1	1	14440	3.5	506	1	26	13610	511	1	14900	573
		RHODE ISLAND	1	1	9320	3.6	340	1	113	10030	378	1	9647	363
		NEW YORK	1	1	11810	3.6	426	1	20	11000	395	1	11260	397
	955870	MAINE	4	7	11126	3.6	399	1	2	10970	400	1	11816	435
	961102	MAINE	46	126	11075	3.7	409	34	8	11341	427	2	11021	421
	964395	MAINE	46	58	11337	3.6	409	40	12	12160	462	1	11836	456
		NEW HAMPSHIRE	94	158	11124	3.6	400	77	15	11680	453	2	11635	445

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	AV. FAT LB.
		VERMONT	47	75	10800	3.7	392	11	14	11176	441	2	10478	426
		MASSACHUSETTS	7	11	11114	3.7	409	7	12	11931	457	1	12249	460
		CONNECTICUT	2	5	12179	3.5	420	2	9	11575	417	2	11860	441
		NEW YORK	2	4	12947	3.6	463							
	976709	MAINE	338	437	12277	3.7	452	324	12	12230	472	1	12351	479
		VERMONT	5	5	12036	3.7	446	4	9	12040	457	1	11996	470
		MASSACHUSETTS	7	12	14951	3.5	525	6	19	12745	479	1	13296	501
		RHODE ISLAND	1	1	12860	3.9	498	1	11	11450	427			
		CONNECTICUT	5	6	12308	3.6	446	5	41	12091	476	1	11925	452
		PENNSYLVANIA	1	2	14950	3.7	545	1	18	13135	500	2	14634	550
	1007202	MAINE	17	56	10857	3.7	399	13	7	12240	463	3	11593	442
	1008565	MAINE	364	654	12049	3.7	445	321	10	11860	457	2	11443	443
		NEW HAMPSHIRE	1	4	12232	3.2	394	1	10	12425	433	2	12377	453
		MASSACHUSETTS	3	4	12158	3.3	405	3	18	13600	482	1	13796	503
	1019847	MAINE	189	430	10091	3.8	382	134	9	10641	409	2	10229	395
		MASSACHUSETTS	1	1	10390	3.8	396	1	9	13460	505	1	13244	501
	1026170	MAINE	8	9	12510	3.8	471	8	11	12896	500	1	11909	471
		MASSACHUSETTS	1	1	9630	4.1	397	1	17	9650	412			
	1032311	MAINE	343	624	11193	3.9	440	305	11	11672	450	2	11352	440
		MASSACHUSETTS	5	14	12244	3.8	466	5	16	11889	438	3	12051	445
	1036278	MAINE	30	56	11581	3.9	452	26	10	12973	491	2	11807	456
	1041559	MAINE	226	296	11990	3.9	460	223	13	11800	457	1	11866	460
		NEW HAMPSHIRE	1	1	7080	4.1	289	1	50	12470	470	1	13843	517
		MASSACHUSETTS	2	3	13208	4.0	524	2	9	12803	480	2	15914	617
		NEW JERSEY	1	1	17460	3.9	688	1	18	13870	500	1	13309	491
	1044218	MAINE	97	224	10893	3.9	417	81	9	10961	427	2	10329	407
		MASSACHUSETTS	1	6	12780	3.6	454	1	3	12336	519	3	14661	569
	1063237	MAINE	15	50	13032	3.8	490	13	11	12337	480	3	12163	484
		MASSACHUSETTS	1	1	18160	3.8	692	1	8	15620	579	1	16154	629
	1076177	MAINE	34	78	12011	3.6	435	34	11	12175	471	2	11852	452
	1093670	MAINE	46	98	12408	3.7	453	45	14	12183	467	2	11488	441
		MASSACHUSETTS	1	1	6590	3.5	229					1	11107	368
	1110011	MAINE	202	271	11566	3.8	441	192	13	11968	464	1	11953	466
		MASSACHUSETTS	4	5	12426	3.6	440	3	3	11428	434	1	11151	437
	1118413	MAINE	83	93	11938	3.7	433	81	14	12020	466	1	12483	484
		MASSACHUSETTS	2	2	12965	3.9	492	2	15	12325	473	1	12475	482
		RHODE ISLAND	1	1	12640	4.2	537	1	48	10060	397	1	10780	417
	1119252	MAINE	6	6	12338	4.0	487	5	15	12060	485	1	12993	503
	1119255	MAINE	20	32	10761	3.8	406	20	8	10592	403	2	10643	413
	1121690	MAINE	31	62	11378	4.0	452	26	8	11830	456	2	11562	462
	1131918	MAINE	16	24	10714	3.6	384	15	15	11739	451	1	11089	421
		CONNECTICUT	1	1	16830	3.9	652	1	23	15640	578	1	8993	487
	1149584	MAINE	36	49	11137	3.8	417	33	12	11901	433	1	11251	435
		NEW HAMPSHIRE	1	1	10940	4.3	465	1	23	12660	489	1	11728	471
		MASSACHUSETTS	1	1	14080	3.8	539	1	27	12500	452	1	13385	495
	1170425	MAINE	52	66	11694	3.8	438	51	13	12354	469	1	12171	468
		MASSACHUSETTS	1	1	9240	3.8	352	1	5	12490	445	1	11151	437
	1188418	MAINE	33	33	12232	3.7	455	33	15	11436	440	1	12174	469
		PENNSYLVANIA	1	1	14940	4.0	604	1	21	12860	494	1	13865	520
	1206039	MAINE	97	142	12199	3.8	458	90	11	12707	485	1	12407	479
	1211384	MAINE	173	231	13010	3.8	488	165	13	12104	466	1	12231	473
		MASSACHUSETTS	1	1	14410	3.3	482	1	27	12490	455	1	13287	491
		CALIFORNIA	2	2	17280	3.6	620	2	401	15300	560			
	1212395	MAINE	187	226	12420	3.7	463	177	13	11938	462	1	12303	476
		VERMONT	1	1	16590	3.5	585	1	22	17440	646	1	16383	619
		MASSACHUSETTS	1	1	7520	3.7	277	1	22	13180	491	1	13156	488
		CONNECTICUT	2	3	16185	4.0	641	2	40	15090	571	2	14378	551
	1215669	MAINE	98	122	12884	3.8	484	96	15	12256	476	1	12255	478

TABLE 16.--DAUGHTER-AVERAGE OF SIRS IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPDRARY NO. RECORDS	MILK LB.	AV. FAT LB.	YEARLY HERD NO.	MILK LB.	AV. FAT LB.
JER.	1235665	MAINE	15	16	11883	3.9	459	15	13	12545	479	1	12748	494
	1242278	MAINE	54	56	13088	3.6	473	53	14	12331	477	1	12754	488
	394915	MAINE	116	311	7317	5.0	365	27	9	7923	417	3	8125	416
		MASSACHUSETTS	42	113	8136	5.1	411	7	8	8477	440	2	8082	433
		CONNECTICUT	1	2	7345	5.3	390							
		NEW YORK	1	3	8663	4.6	400					1	10617	463
	399903	MAINE	72	218	6994	5.3	371	15	9	7411	391	2	7546	399
		VERMONT	6	18	8529	5.1	426	1	73	10600	545	1	11543	580
		MASSACHUSETTS	23	76	7296	5.3	385	6	6	8021	440	2	8313	449
		NEW YORK	1	3	10537	5.3	557					3	10293	454
	404631	MAINE	29	95	7325	5.3	388	4	9	7705	404	4	7761	411
		MASSACHUSETTS	5	11	7623	4.9	366	1	2	5267	249	1	6693	343
	405148	MAINE	31	69	7617	5.3	400	2	8	7062	378	2	7576	381
		NEW HAMPSHIRE	4	15	7681	5.3	402	1	13	8195	417	4	8014	402
		VERMONT	1	1	6690	4.8	324							
		MASSACHUSETTS	2	6	7848	5.9	460	1	9	9133	537	1	7728	460
		CONNECTICUT	1	1	10340	5.6	576							
	407251	MAINE	20	43	7349	5.2	379	3	7	7186	373	2	7704	393
	414844	MAINE	36	102	8286	5.1	421	6	10	8097	423	2	7925	410
		NEW HAMPSHIRE	1	1	6890	5.3	362							
		VERMONT	2	4	6909	5.1	346							
		MASSACHUSETTS	12	34	6737	5.2	351	6	12	7846	404	3	7786	413
		CONNECTICUT	3	10	8606	5.7	500	3	12	7997	420	3	7916	421
	439356	MAINE	31	67	7365	5.5	403	8	8	7948	398	2	8223	408
		NEW HAMPSHIRE	1	4	7255	5.6	413	1	6	8083	417	1	6126	304
		MASSACHUSETTS	7	22	8204	5.4	442	1	8	7150	335	1	7565	377
		CONNECTICUT	1	6	10365	5.2	534	1	5	8687	457	6	8366	427
	446195	MAINE	40	124	7467	4.9	366	5	6	7755	404	3	8435	432
	446990	MAINE	74	170	6793	5.4	368	13	7	8039	424	2	8069	421
		MASSACHUSETTS	10	25	7131	5.5	389	5	10	8317	437	2	8038	431
		CONNECTICUT	1	2	9115	5.4	494							
	448028	MAINE	79	144	6729	5.4	360	29	11	7778	407	2	7735	406
		MASSACHUSETTS	5	9	6491	5.7	360	3	10	7988	393	1	8046	411
		CONNECTICUT	2	6	9340	5.4	510	1	6	8448	446	5	8284	419
		MINNESOTA	1	1	5830	6.1	358							
	449058	MAINE	1	2	5660	5.2	295							
		MASSACHUSETTS	1	6	6203	5.6	347	1	7	7722	410	5	7619	401
	452577	MAINE	4	5	6788	5.0	341							
	455325	MAINE	50	127	7018	5.2	367	9	8	7542	407	3	7850	424
		MASSACHUSETTS	5	14	8810	5.2	452	1	6	8504	444	3	9476	472
		RHODE ISLAND	1	1	6650	5.7	392							
	456094	MAINE	51	86	6978	5.2	364	19	12	7859	402	2	8139	419
	456604	MAINE	21	105	8441	5.4	462	3	10	8869	449	2	9022	463
		MASSACHUSETTS	2	3	8595	5.8	500							
	465966	MAINE	197	420	8279	5.3	433	80	11	8427	432	2	8542	437
		NEW HAMPSHIRE	1	1	6980	5.6	403							
		VERMONT	1	4	8245	5.8	475							
		MASSACHUSETTS	14	43	8380	5.4	448	2	6	8242	419	4	8781	438
		CONNECTICUT	1	3	9970	5.0	501							
		PENNSYLVANIA	1	4	8896	5.6	500	1	6	8235	479	1	6649	391
	465967	MAINE	3	6	6965	5.4	372							
		MASSACHUSETTS	2	2	7175	5.6	354							
	465969	MAINE	102	251	8179	5.1	413	41	9	7954	415	3	8103	415
		VERMONT	2	7	6057	5.3	324							
		MASSACHUSETTS	10	32	7804	5.2	408	6	10	6720	350	3	7580	386
	466948	MAINE	60	142	7295	5.2	377	30	11	8014	423	2	8216	428
		MASSACHUSETTS	8	28	8302	5.1	425	1	9	8627	463	1	8426	455
		CONNECTICUT	1	2	8650	5.2	431	1	18	7980	421	2	7041	372
	469860	MAINE	19	22	7980	5.1	390	7	11	7309	369	1	7855	401
	473956	MAINE	119	180	8585	5.1	434	64	12	8549	445	1	8961	461
		MASSACHUSETTS	4	6	8743	4.9	431	1	17	8410	416	1	9107	396

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	NO.	MILK LB.	AV. FAT LB.
	482860	MAINE	18	41	6793	5.5	370	6	10	7425	381	2	7342	381
	491731	MAINE	32	65	7158	5.4	384	8	11	8118	434	3	7937	424
		MASSACHUSETTS	7	17	6657	5.3	355	2	6	7020	352	2	6668	342
		CONNECTICUT	1	1	9130	4.8	436					1	12230	462
	496088	MAINE	16	36	7543	5.5	412	7	12	8338	419	2	7987	404
	502323	MAINE	62	79	8498	5.2	442	35	20	9045	458	1	9291	471
	503200	MAINE	45	56	7589	5.3	397	23	13	8202	423	1	8883	454
	509853	MAINE	60	76	7918	5.5	430	33	14	8244	416	1	8732	438
	512472	MAINE	10	26	7699	5.0	379	6	13	8447	426	2	8336	399
	514415	MAINE	11	21	7205	5.3	382	5	12	8223	434	2	7257	371
	530279	MAINE	21	33	8778	5.4	469	15	16	8535	448	1	8791	456
	531147	MAINE	50	80	7428	5.1	377	21	13	7917	406	2	7886	403
	537732	MAINE	145	214	7966	5.2	412	79	15	8234	429	1	8838	447
	552976	MAINE	25	40	8140	5.2	422	16	29	9344	479	1	9105	474
		MASSACHUSETTS	1	2	7500	5.7	428	1	30	7085	397	2	7734	436
	565429	MAINE	34	38	8185	4.8	388	23	13	8315	463	1	8939	459
		NEW HAMPSHIRE	1	1	5330	5.0	264	1	11	6870	369	1	7586	395
		NEW YORK	2	5	8773	4.6	397	2	42	9360	500	2	9881	524
	567924	MAINE	16	16	6461	5.5	356	9	12	7710	394	1	8519	435
	571912	MAINE	13	13	6655	5.7	381	5	5	7556	379	1	9148	471
M. SH	44513	MAINE	1	1	3460	4.5	155	1	7	7850	307	1	7031	277
	62469	MAINE	2	2	7760	3.9	300							
		NEW HAMPSHIRE	2	5	8089	4.1	342	1	3	17100	617	1	10606	397
		MASSACHUSETTS	1	1	6670	4.1	274	1	14	8630	327			
		CONNECTICUT	1	1	7070	4.4	311	1	6	7160	280	1	7249	291
	70154	MAINE	8	13	9238	3.7	337	1	11	11510	467	1	11042	418
		NEW HAMPSHIRE	3	5	7288	3.6	264	2	4	10133	369	2	10336	391
	146822	MAINE	6	7	8121	3.8	303					1	10213	375
		NEW HAMPSHIRE	1	1	7260	3.7	266					1	9167	344
	2011863	MAINE	2	2	7640	3.7	276	2	8	9310	397	1	9521	380
		NEW HAMPSHIRE	1	1	8060	3.7	296	1	3	17820	698	1	10606	397
	2486947	MAINE	13	20	7987	3.9	306	11	8	8431	322	2	8882	343
		NEW HAMPSHIRE	1	1	7970	3.6	286	1	14	9100	354	1	8775	328
		VERMONT	2	3	10500	4.0	405	1	3	11705	454	2	8960	355
		MASSACHUSETTS	3	3	7807	3.7	291	3	5	6753	260			
		CONNECTICUT	1	1	3860	4.4	172	1	8	8700	344	1	7772	306
002 AYR.	61571	NEW HAMPSHIRE	1	6	13213	4.2	554	1	9	9282	402	3	10046	419
		VERMONT	1	1	3840	3.9	151							
	62198	NEW HAMPSHIRE	4	10	8931	4.1	365	1	2	9690	420	1	7467	350
GUER	214202	NEW YORK	3	10	10993	4.7	529	1	7	11000	525			
		ILLINOIS	1	1	7090	4.4	311							
	251484	MAINE	15	37	7244	5.2	371							
		VERMONT	1	1	5920	5.5	324							
	262792	MAINE	45	127	7600	4.8	362	5	6	9415	406	2	8058	378
		VERMONT	1	1	6160	5.2	322							
	269070	MAINE	39	97	6936	4.8	335	2	9	7645	371	3	7789	376
		MASSACHUSETTS	1	4	8408	4.7	398							
	288161	MAINE	1	1	6470	6.2	400							
	294933	MAINE	16	52	7306	4.9	356	1	4	8117	393	2	7554	371
		VERMONT	1	2	6945	5.0	347							
	306969	MAINE	2	5	7659	4.9	363							
	312969	MAINE	14	38	6511	4.9	317	1	5	9220	380	2	8050	349
		INDIANA	1	1	6006	4.9	292							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY NO. RECORDS	MILK LB.	AV. FAT LB.	YEARLY NO. RECORDS	HERO MILK LB.	AV. FAT LB.
	333442	MAINE	6	25	7556	5.4	403	2	7	8256	387	4	8612	395
		MASSACHUSETTS	2	5	6858	4.4	293	2	4	6480	324	2	5919	284
		CONNECTICUT	1	1	5380	5.2	260							
		NEW YORK	3	7	7734	5.0	384	1	27	10705	576			
		PENNSYLVANIA	1	2	6355	5.4	345							
		MARYLAND	1	4	6585	5.3	346							
HOL.	709963	MAINE	11	28	9588	3.6	341							
	755100	MAINE	6	25	10930	3.5	392	1	6	11728	428	3	11856	443
	758123	MAINE	16	40	10688	3.6	365	1	5	10400	368	1	9756	348
		NEW YORK	18	85	13221	3.6	481							
	760153	MAINE	5	20	8298	3.8	321	1	5	11982	470	2	13124	509
	760621	MAINE	28	67	9888	3.6	355	7	8	10220	406	2	10585	417
		VERMONT	1	1	13040	3.5	452							
	781062	MAINE	15	49	10307	3.5	360	1	4	10820	397	1	12699	422
	782989	MAINE	18	41	10452	3.7	390	1	11	12777	495	1	12666	506
		NEW HAMPSHIRE	1	2	15855	3.7	586							
	854889	MAINE	33	81	9290	3.7	343	6	7	11227	420	2	10427	404
		NORTH CAROLINA	1	2	8310	4.3	357							
	880366	MAINE	11	37	11889	3.6	423	4	6	10401	392	2	10015	407
		NORTH CAROLINA	1	2	12490	3.5	440							
JER.	338089	MAINE	8	19	7016	5.3	366							
	377872	MAINE	3	5	9758	5.3	520							
		VERMONT	2	7	8539	5.3	451					1	6878	356
		MASSACHUSETTS	5	24	9392	5.3	496	1	42	9700	506	4	10363	544
		CONNECTICUT	1	6	6413	5.5	354	1	8	8243	458	2	8393	458
		NEW YORK	10	44	7596	5.5	414	2	24	7755	393			
		OHIO	1	1	7820	5.5	427							
		MARYLAND	1	3	6087	5.5	329	1	1	8170	400			
	388591	MAINE	26	84	6477	5.2	338	2	4	6549	332	2	7205	368
	389028	MAINE	23	67	7479	5.0	371							
	392834	MAINE	2	3	5183	4.6	236							
	416239	MAINE	19	47	6455	5.6	361							
	433645	MAINE	50	147	7957	5.1	400	7	5	7576	388	3	7422	389
		MASSACHUSETTS	25	85	8589	4.9	419	8	8	8229	435	2	8089	427
		CONNECTICUT	1	2	10490	4.9	517							
M. SH	2017786	MAINE	5	13	8544	4.0	341	1	7	9120	342	1	7499	289
003 HOL.	817970	MAINE	31	78	10334	3.7	379	7	6	11210	430	2	10250	402
		NORTH CAROLINA	1	8	11805	3.7	432	1	13	12620	456	4	12565	436
	440723	MAINE	4	17	6817	5.0	342	2	5	6569	341	5	6420	335
004 GUER	171200	MAINE	6	16	6129	5.2	311	1	8	8093	417	1	7510	400
		MASSACHUSETTS	1	5	9004	4.7	428							
	245152	MAINE	7	15	8018	4.7	377	1	10	8028	382	1	7314	366
		MASSACHUSETTS	1	3	9843	4.2	417	1	15	9333	408	1	9363	440
	246126	MAINE	11	34	7270	5.1	366							
	251367	MAINE	7	17	8096	4.7	378							
		MASSACHUSETTS	1	2	11520	4.2	484							
	275597	MAINE	12	39	6984	5.0	350	2	11	8273	386	3	8595	401
		CONNECTICUT	1	7	9937	5.2	515							
	309691	MAINE	5	10	6062	4.7	284							
		CONNECTICUT	1	2	10205	4.5	461							
	337118	MAINE	8	17	8311	4.5	373	4	20	11614	464	2	11464	449
HOL.	653483	MAINE	69	181	11203	3.5	386	5	10	11648	451	2	10536	419
		MASSACHUSETTS	1	1	9480	3.6	346							
		NORTH CAROLINA	1	1	10330	3.8	396							
	748047	MAINE	35	109	11065	3.6	393	4	7	11710	429	2	10163	391
		NEW HAMPSHIRE	1	1	11340	3.1	355							
		MASSACHUSETTS	1	3	9677	3.8	363							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
	777657	MAINE	10	36	11589	3.7	431	2	6	12256	487	1	14105	555
JER.	388705	MAINE	3	6	6325	5.6	355							
		VERMONT	1	4	6908	5.1	349							
		MASSACHUSETTS	13	43	7842	5.1	398	4	9	8198	438	3	8640	461
	401036	MAINE	5	17	6376	5.0	322	2	6	6224	312	4	7390	376
	401923	VERMONT	3	6	4400	6.3	273							
		MASSACHUSETTS	3	9	7480	5.6	421	1	1	8170	448			
	409325	MAINE	2	5	7772	5.5	420							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV. YEARLY HERO			
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	AV. FAT LB.
000	AYR.	41058	NEW HAMPSHIRE	2	8	9499	4.3	404							
			VERMONT	3	8	8087	4.4	357							
	GUER	259671	VERMONT	1	1	9120	5.4	492							
			CONNECTICUT	4	16	7740	5.1	384							
	HOL.	697696	NEW HAMPSHIRE	1	2	11425	3.4	389							
			VERMONT	1	3	9303	3.4	321							
001	AYR.	77424	NEW HAMPSHIRE	4	14	9181	4.3	396	2	11	9365	392	4	9148	384
	GUER	237761	MAINE	3	12	7912	5.0	392	3	6	8354	402	2	8810	422
			NEW HAMPSHIRE	36	100	7641	4.7	359	9	11	8103	371	3	8228	377
			VERMONT	16	42	7104	4.8	338							
			MASSACHUSETTS	3	6	7841	4.5	351	2	9	10995	452	1	10900	458
			NEW YORK	3	4	8735	4.8	412	1	2	6645	294			
		270988	NEW HAMPSHIRE	3	7	7607	5.2	396							
			NEW YORK	3	3	7327	4.7	345							
		287749	NEW HAMPSHIRE	4	8	8446	4.6	390	2	3	8547	408	1	8993	449
			VERMONT	1	6	7425	4.6	346							
			OHIO	13	27	6983	4.5	313	5	20	8152	373	2	8209	380
			NORTH CAROLINA	1	3	6733	4.8	326	1	43	7587	374	1	6714	313
		289244	NEW HAMPSHIRE	108	253	8312	4.6	379	74	28	9091	397	2	8970	390
			VERMONT	48	117	8128	4.6	375	1	3	10360	523	5	9162	465
			MASSACHUSETTS	4	6	7226	4.7	341	2	19	8675	412	1	8611	422
			NEW YORK	1	1	7020	4.6	322							
			PENNSYLVANIA	1	1	9160	4.8	441	1	18	9100	438	1	9352	476
			NORTH CAROLINA	1	1	6310	4.9	310							
		300208	NEW HAMPSHIRE	19	57	7868	4.8	380	16	33	8507	378	3	8688	391
			VERMONT	8	22	8323	4.9	402							
			MASSACHUSETTS	2	5	9062	5.0	449	2	10	8257	398	2	5783	270
			NEW YORK	1	4	10403	4.3	446	1	58	9320	460	2	10709	523
		312690	MAINE	1	3	7923	5.2	412	1	5	8293	411	3	8128	406
			NEW HAMPSHIRE	19	32	7368	4.7	348	10	16	7560	348	2	7876	342
			VERMONT	16	44	8134	4.8	369	3	5	9759	455	3	9501	429
			NEW YORK	1	3	5940	5.0	298							
			NORTH CAROLINA	1	1	4660	5.1	238	1	72	6530	319	1	6714	313
		313279	MAINE	1	1	6610	5.3	349							
			NEW HAMPSHIRE	12	32	6939	5.0	339	6	5	8372	392	3	8393	405
			VERMONT	1	1	6400	4.9	315							
		316271	NEW HAMPSHIRE	2	6	7437	4.9	363	1	17	11006	431	5	10689	413
			VERMONT	2	9	7161	4.9	347	1	2	7080	298	3	7274	333
		324096	NEW HAMPSHIRE	1	1	5900	5.1	302							
		324250	NEW HAMPSHIRE	2	5	7603	5.2	396							
			VERMONT	1	3	9593	4.6	446							
			MASSACHUSETTS	1	2	6620	5.6	369							
		333456	NEW HAMPSHIRE	2	7	7398	4.6	339	2	9	7561	348	4	8004	378
			VERMONT	2	5	9740	4.7	459							
		335302	NEW HAMPSHIRE	1	1	8460	4.7	399							
		336395	NEW HAMPSHIRE	9	18	7729	5.2	400	1	5	7073	319	2	7690	335
			VERMONT	2	15	8669	5.2	447	1	1	7712	356	5	9415	461
			NEW YORK	1	1	7140	5.1	365							
		337446	NEW HAMPSHIRE	16	38	7106	4.9	345	9	6	8055	364	2	8194	379
			VERMONT	7	17	7920	5.0	392							
			MASSACHUSETTS	2	2	6245	5.1	316	1	3	5690	292			
		340080	NEW HAMPSHIRE	3	4	7063	4.7	334	3	6	8230	379	1	9625	445
			VERMONT	4	6	7344	5.1	371	2	19	8490	411	1	8230	388
		341048	NEW HAMPSHIRE	2	6	8762	5.0	433							
			NEW YORK	1	1	9520	4.8	458							
		342952	NEW HAMPSHIRE	1	5	7100	4.9	347							
			VERMONT	2	8	9400	4.8	452							
		354137	NEW HAMPSHIRE	9	21	7482	5.0	377	5	5	8700	380	3	7385	351
			VERMONT	2	2	6205	4.9	304							
			NORTH CAROLINA	1	2	7830	4.9	379							
		369578	VERMONT	2	5	8269	4.3	351							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	YEARLY HERD NO.	MILK LB.	AV. FAT LB.
	379750	VERMONT	1	3	10077	5.1	516							
	382002	NEW HAMPSHIRE	4	9	8577	5.1	433	4	49	9885	409	2	9669	401
		VERMONT	5	11	9430	4.8	451	3	21	10733	478	1	8949	386
		CONNECTICUT	69	175	8582	4.9	416	56	10	9202	420	2	8976	413
	396068	NEW HAMPSHIRE	19	29	6925	5.1	348	12	42	8947	391	2	8863	389
		VERMONT	20	35	8056	5.2	417	8	9	9060	412	1	9066	406
		PENNSYLVANIA	1	2	8525	5.6	475							
		INDIANA	27	74	9455	5.4	510	17	7	11173	584	3	10425	540
		MICHIGAN	2	5	7197	5.5	392	1	3	11660	554	3	11463	566
		WEST VIRGINIA	1	2	7415	4.9	363							
	396943	NEW HAMPSHIRE	3	8	8330	5.1	418	3	40	9242	420	3	8625	399
		VERMONT	2	3	8100	4.7	383	1	2	7920	398	1	10257	391
HOL.	750258	NEW HAMPSHIRE	30	88	11951	3.7	439	18	10	11708	444	3	11587	434
		VERMONT	13	26	10165	3.7	372							
	758846	MAINE	5	21	13665	3.9	537	4	18	12528	486	4	12443	491
		NEW HAMPSHIRE	57	145	11135	3.7	411	20	10	11548	426	3	10935	400
		VERMONT	16	57	12132	3.9	470							
		MASSACHUSETTS	5	10	11547	4.0	455	3	54	12523	476	1	12186	467
		RHODE ISLAND	2	4	12573	3.9	483	1	18	12465	438	1	10922	390
		NEW JERSEY	4	10	13307	3.8	501							
	772380	NEW HAMPSHIRE	53	146	11636	3.6	421	31	9	11551	439	3	11430	439
		VERMONT	32	92	11186	3.7	412	1	15	13190	459	1	12491	450
		NEW YORK	2	10	11520	3.4	390							
		NEW JERSEY	1	4	11635	3.8	440							
		PENNSYLVANIA	196	639	11107	3.7	403	84	9	11576	429	2	11833	442
	775869	MAINE	1	4	10153	3.6	368	1	23	12003	435	3	11245	411
		NEW HAMPSHIRE	22	41	10480	3.6	382	11	4	12341	467	2	11044	416
		VERMONT	11	30	11195	3.6	407	2	8	11480	437	1	12203	457
	792318	MAINE	1	4	11575	3.5	399	1	9	13893	517	1	14268	549
		NEW HAMPSHIRE	31	105	10379	3.7	383	17	10	11223	412	3	10482	395
		VERMONT	11	27	9924	3.9	385	3	15	11504	404	2	11607	407
		ILLINOIS	1	1	14930	3.5	515							
	801375	NEW HAMPSHIRE	20	53	11688	3.5	412	12	9	11100	413	2	11083	414
		VERMONT	9	23	9822	3.6	360							
		MASSACHUSETTS	1	3	10457	4.3	451	1	5	10813	388	3	10755	390
		NEW YORK	1	1	13730	4.0	551							
	832735	MAINE	1	2	16670	3.3	555	1	15	11490	421	1	9047	323
		NEW HAMPSHIRE	76	180	10799	3.7	394	49	9	11196	418	2	10969	412
		VERMONT	45	106	11096	3.8	420	6	18	12661	496	1	12588	501
		MASSACHUSETTS	4	7	9872	3.5	348	3	10	11433	424	2	10721	396
		RHODE ISLAND	1	2	12020	3.6	427	1	18	12350	436	1	10922	390
		NEW YORK	2	7	12428	3.4	416							
	841799	NEW HAMPSHIRE	2	3	12640	3.9	487	2	68	9480	384	2	9380	386
	842450	NEW HAMPSHIRE	10	31	10418	3.5	370	2	9	11015	405	4	10295	389
		MASSACHUSETTS	3	14	12208	3.6	435	3	10	10896	448	2	11834	470
	846938	NEW HAMPSHIRE	2	4	10633	3.5	374							
		VERMONT	2	6	10814	3.3	355							
		CONNECTICUT	1	4	14000	3.8	528							
	853054	NEW HAMPSHIRE	1	2	12660	3.2	408							
	866635	MAINE	1	2	12045	3.8	458	1	17	11260	418	2	10628	386
		NEW HAMPSHIRE	36	91	11290	3.7	418	31	11	11416	431	3	11003	414
		VERMONT	17	38	10598	3.8	404	2	17	11995	448	2	11994	450
		MASSACHUSETTS	2	3	7950	4.1	322	2	13	9373	367	2	9522	374
		CONNECTICUT	1	5	16456	3.3	548	1	13	14532	557	4	14443	544
		PENNSYLVANIA	2	5	10744	3.9	414	1	17	10940	385	1	10824	377
	920562	MAINE	3	4	9115	3.7	340	3	7	10118	390	2	12334	471
		NEW HAMPSHIRE	199	407	11367	3.8	433	182	16	11478	436	2	11303	430
		VERMONT	77	131	10687	3.8	408	13	18	11999	460	1	12390	484
		MASSACHUSETTS	7	11	11453	3.6	417	7	6	11588	436	1	11098	421
		RHODE ISLAND	2	2	12520	4.2	521	2	7	13525	500	1	13124	481
		CONNECTICUT	3	4	11257	4.0	442	3	16	11140	414	1	13236	485
		NEW YORK	1	1	11420	3.8	433							
		MARYLAND	1	1	8320	4.4	363	1	15	10870	370			
	1045647	NEW HAMPSHIRE	114	202	11636	3.9	453	102	16	12019	459	2	11650	445
		VERMONT	55	100	10118	3.9	394	12	14	9665	363	2	10103	382
		MASSACHUSETTS	3	3	12447	4.0	494	3	11	11533	414	1	11383	430
		RHODE ISLAND	1	2	13135	3.8	502	1	3	15815	582	1	15816	576
		NEW YORK	1	5	13784	4.0	557							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY NO.	RECORDS NO.	MILK LB.	FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
JER.	383056	NEW HAMPSHIRE	7	28	8068	4.9	387	4	6	7317	374	2	7300	374	
	406867	NEW HAMPSHIRE VERMONT	17 44	61 138	7864 7835	5.2 5.2	408 409	5 3	7 4	8108 7877	419 415	3 3	7973 8230	416 390	
	407913	MAINE	11	26	6540	5.0	331	2	3	7055	353	2	7294	378	
	407971	NEW HAMPSHIRE VERMONT MASSACHUSETTS CONNECTICUT NEW YORK	41 86 4 4 1	115 220 4 11 4	7175 7295 6973 9506 7318	5.4 5.3 5.4 5.5 5.7	388 386 376 521 417	14 10 1 3 1	10 7 3 2 4	7731 7731 9200 6838	409 409 515 373	3 1 1 2	7800 9887 8251 6922	412 394 453 352	
	411571	NEW HAMPSHIRE VERMONT MASSACHUSETTS CONNECTICUT	8 8 1 1	20 25 6 1	7996 7453 8122 7500	5.3 5.2 6.0 5.4	421 384 489 405	2	12	9222	517	2	8880	486	
	415487	NEW HAMPSHIRE	1	2	6505	4.8	312								
	417644	VERMONT	1	1	4180	4.9	203								
	431198	NEW HAMPSHIRE VERMONT MASSACHUSETTS NEW YORK	32 60 1 2	93 146 4 7	8246 7797 6803 6470	5.0 4.9 5.6 4.9	412 382 384 319	11 3	12 6	8187 8627	424 458	2 1	7879 8372	405 403	
	434089	NEW HAMPSHIRE	3	11	9514	4.9	463								
	437711	MAINE NEW HAMPSHIRE VERMONT CONNECTICUT NEW YORK	1 50 93 8 1	2 123 217 19 3	8235 7637 7278 9228 7713	5.4 5.1 5.2 5.1 4.6	443 391 373 477 358	18 2 4	10 4 7	8144 8633 9359	401 398 517	2 1 3	8134 7510 9632	406 356 498	
	441107	NEW HAMPSHIRE VERMONT MASSACHUSETTS CONNECTICUT NEW YORK	17 27 1 4 1	46 55 3 7 3	7321 7188 5937 7457 6627	5.3 5.2 5.5 5.1 5.5	386 367 326 375 362	9 1 1 1	10 10 2 5	7882 7600 7870 8160	398 367 419 400	2 1 2	7553 6954 6900	374 344 334	
	442494	NEW HAMPSHIRE VERMONT MASSACHUSETTS CONNECTICUT	8 14 2 2	15 23 2 3	6752 6614 8220 8868	5.6 5.6 5.3 4.9	375 369 421 430	2 1 1	13 13 9	6969 9170 10110	360 481 537	3 1 2	8571 9058 9473	420 470 508	
	447544	NEW HAMPSHIRE VERMONT CONNECTICUT NEW YORK	19 55 4 1	41 140 9 4	7870 7493 8316 7698	5.2 5.2 5.5 5.3	406 391 456 406	8 2 1	13 59 14	7871 8368 8515	416 435 466	3 1 2	7681 8588 9473	401 426 508	
	448951	NEW HAMPSHIRE VERMONT MASSACHUSETTS CONNECTICUT	3 6 4 2	8 11 7 5	7457 7046 7610 9094	5.1 4.9 5.3 5.2	382 340 398 468	1 1	9 24	8545 9275	438 470	2 1	9554 8655	502 461	
	451154	NEW HAMPSHIRE VERMONT	4 9	9 13	8386 6792	5.7 5.4	478 365	1 2	2 5	7125 7473	396 399	2 2	6965 6682	362 354	
	461876	NEW HAMPSHIRE VERMONT	7 14	23 50	7273 7608	5.3 5.6	378 425	2 1	3 2	6504 10685	323 637	4 2	6885 10034	360 562	
	467630	NEW HAMPSHIRE VERMONT RHODE ISLAND	1 8 1	5 21 1	7844 7376 4290	4.8 5.1 4.4	377 374 187	1 1	23 29	9226 9990	465 513	5 1	8489 11118	418 570	
	473399	NEW HAMPSHIRE VERMONT	16 13	17 20	7808 7447	5.0 5.1	388 378	8 1	10 11	7856 6490	396 316	1 1	7356 6845	363 336	
	488287	NEW HAMPSHIRE VERMONT RHODE ISLAND CONNECTICUT	3 14 1 2	8 36 3 6	8300 7511 11107 6751	4.9 5.2 4.8 4.6	409 388 532 310	1 1 1	21 16 2	8767 9245 10150	485 475 468	3 2	9606 8818	510 462	
	495453	NEW HAMPSHIRE VERMONT MASSACHUSETTS	19 62 2	28 93 5	7792 7146 8848	5.3 5.4 5.6	409 383 494	7 13 2	10 10 15	8674 7798 9588	450 403 469	2 1 3	8175 7941 8577	419 387 451	
	495987	NEW HAMPSHIRE VERMONT NEW YORK	3 8 1	12 21 3	10401 7556 10000	4.8 5.0 5.6	496 377 557	2 1	4 11	11169 6973	552 380	5	9158	479	
	495989	NEW HAMPSHIRE VERMONT	3 10	9 23	8234 7584	5.4 4.9	447 360					1	10072	506	

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY NO. RECORDS.	MILK LB.	AV. FAT LB.	YEARLY HERD NO.	MILK LB.	AV. FAT LB.
		510477	NEW HAMPSHIRE	5	6	9432	5.1	485	3	12	9403	499	1	8513	448
			VERMONT	11	15	7609	5.0	381	7	6	8267	416	1	7863	415
		512931	NEW HAMPSHIRE	2	2	7460	5.7	426	2	3	7935	398	1	7134	361
			VERMONT	1	1	6770	6.0	404							
002	GUER	317318	VERMONT	5	16	6621	4.8	315							
			NEW YORK	1	1	9320	4.6	433							
003	AYR.	67576	MAINE	4	12	6671	4.5	298	1	11	8595	367	2	7619	328
			NEW HAMPSHIRE	6	19	8462	4.5	377	1	9	7860	308	2	7761	305
			NEW YORK	1	4	8940	4.2	372	1	18	8855	375	2	8982	372
	GUER	296224	NEW HAMPSHIRE	19	45	8627	4.6	391	14	37	8998	385	3	8912	380
			VERMONT	10	19	8661	4.9	418	1	5	10800	450	1	10922	440
			CONNECTICUT	1	1	7080	4.3	306	1	10	6710	314			
		303185	NEW HAMPSHIRE	3	5	9031	4.7	419	1	6	11450	505	1	11467	427
			MASSACHUSETTS	1	2	8370	4.8	396	1	21	8825	410	2	9292	430
			CONNECTICUT	1	1	7760	4.9	383	1	18	10090	491	1	9385	433
			PENNSYLVANIA	1	2	7885	5.3	417							
		318968	NEW HAMPSHIRE	34	71	8142	4.7	383	28	29	9515	410	2	9131	399
			VERMONT	31	53	7537	4.7	356	5	6	7404	345	2	8682	434
			MASSACHUSETTS	1	3	6813	4.4	302							
			MARYLAND	1	1	8490	4.9	419	1	34	7540	353	1	9330	445
			NORTH CAROLINA	1	1	6860	4.8	328	1	94	8490	406			
		334413	NEW HAMPSHIRE	12	19	7987	4.3	341	9	16	9138	409	2	9175	398
			VERMONT	14	26	8226	4.4	358	4	12	9058	427	2	10129	471
			MASSACHUSETTS	1	2	5890	4.4	261	1	5	7555	338	2	6911	314
			NORTH CAROLINA	1	3	9097	4.1	376	1	100	8947	411	3	8215	385
		340083	NEW HAMPSHIRE	2	2	8780	4.2	368	1	9	10670	459	1	10344	462
			VERMONT	3	3	7930	4.7	375	3	16	9970	424	1	9501	432
		391470	MAINE	1	1	7900	4.0	316	1	5	8610	414			
			NEW HAMPSHIRE	93	167	8317	4.7	387	72	30	9265	414	2	9043	398
			VERMONT	53	81	8578	4.7	405	17	12	9472	424	1	9057	417
			NORTH CAROLINA	2	9	8802	4.8	412	2	120	8744	405	4	6281	379
		404003	NEW HAMPSHIRE	31	71	7490	4.7	351	24	16	8843	393	2	8604	380
			VERMONT	20	54	7786	4.7	367	4	7	8839	426	2	8467	407
			MASSACHUSETTS	1	1	9010	4.3	388	1	1	11340	434	1	9548	409
			NEW YORK	1	1	5140	4.9	250							
			NORTH CAROLINA	1	2	11160	4.1	458	1	229	9030	410	1	8818	405
		420672	NEW HAMPSHIRE	3	4	8287	5.0	422	1	84	9300	384	1	8567	362
			VERMONT	3	7	7620	4.4	337							
			MASSACHUSETTS	1	1	8170	4.8	389							
		431992	NEW HAMPSHIRE	5	5	7876	4.3	338	3	7	7667	331	1	8306	369
			VERMONT	5	5	6946	5.0	351	3	14	9323	423	1	9418	415
		447277	NEW HAMPSHIRE	2	3	8303	4.7	385	2	93	9560	382	2	9347	382
			VERMONT	1	1	6640	4.6	307							
		462398	NEW HAMPSHIRE	5	8	7949	5.0	395	4	24	9204	418	2	8072	367
			VERMONT	1	1	5040	4.8	242							
			NORTH CAROLINA	1	4	6263	4.9	307	1	111	8645	403	3	8215	385
		464556	NEW HAMPSHIRE	10	10	7317	4.7	349	8	13	9225	409	1	9314	428
		465780	NEW HAMPSHIRE	8	18	9112	4.5	404	7	6	10141	424	2	9824	418
			VERMONT	11	25	9255	4.5	417	3	15	8681	429	2	8814	427
		472565	MAINE	9	17	8393	5.2	438	8	9	10489	471	2	10272	468
			NEW HAMPSHIRE	1	1	6630	4.4	301	1	105	10150	397	1	9330	379
		478506	NEW HAMPSHIRE	17	29	8341	4.6	384	13	42	9657	418	2	9278	399
			VERMONT	14	21	7795	4.8	370	5	17	9098	420	2	9588	440
			MASSACHUSETTS	1	4	8293	4.3	362	1	30	10810	485	1	11510	509
			NORTH CAROLINA	3	6	7232	5.0	356	3	100	7943	362	1	6017	331
		480767	NEW HAMPSHIRE	3	3	8983	4.6	412	3	12	10353	537	1	9904	419
			VERMONT	1	1	6660	4.5	303							
		496394	NEW HAMPSHIRE	2	2	7945	4.7	377	1	7	9570	443	1	10344	462
			VERMONT	5	6	7961	4.5	357	3	12	8960	400	1	9141	400
		500743	NEW HAMPSHIRE	3	3	7780	4.4	345							
			VERMONT	4	4	6693	4.6	304	1	3	13460	503	1	11467	395
		505583	NEW HAMPSHIRE	1	1	6570	4.6	304	1	11	9260	389			

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY NO. NO.	MILK LB.	FAT LB.	RECORDS NO.	HERD LB.	AV. FAT LB.
	507676	NEW HAMPSHIRE	2	3	5935	4.0	238	2	14	8995	374	2	7630	304
		VERMONT	1	1	10960	4.4	484	1	5	9710	453	1	9200	443
	514515	NEW HAMPSHIRE	1	1	10420	4.4	463	1	56	10190	393	1	9592	386
		VERMONT	1	1	9040	5.2	466	1	19	8380	420	1	8938	427
	515836	VERMONT	1	1	9210	4.9	452	1	1	8120	409	1	11053	526
	519471	NEW HAMPSHIRE	1	1	8280	4.5	371	1	17	9180	659	1	10747	435
	519473	NEW HAMPSHIRE	1	1	7850	5.1	400	1	105	10140	396	1	9330	379
HOL.	818280	NEW HAMPSHIRE	24	70	13029	3.6	464	20	15	12902	482	2	12248	459
		MASSACHUSETTS	3	5	10145	3.8	382	3	10	9965	378	2	10982	434
		RHODE ISLAND	1	4	14613	3.5	514	1	7	15265	569	4	14522	533
		CONNECTICUT	1	1	10500	3.5	368	1	16	9880	375	1	10595	397
		PENNSYLVANIA	4	14	12793	3.3	420	1	7	14051	502	5	13813	503
	844276	MAINE	6	11	11441	3.7	422	6	18	12246	467	1	11983	448
		NEW HAMPSHIRE	519	973	11241	3.8	426	440	17	11479	438	2	11182	426
		VERMONT	331	626	11221	3.8	423	63	15	12486	478	1	11934	464
		MASSACHUSETTS	18	32	11534	3.8	444	15	11	11641	449	1	11668	447
		RHODE ISLAND	4	17	11846	3.7	437	4	6	12132	450	4	12261	446
		CONNECTICUT	2	8	14820	3.8	559	2	24	14019	527	4	13861	520
		NEW YORK	3	6	10291	3.7	381							
		NEW JERSEY	1	1	14900	3.7	554	1	1	14960	590			
	867412	MAINE	5	8	12110	4.0	478	5	12	12201	464	1	11617	444
		NEW HAMPSHIRE	391	756	11259	3.9	437	322	13	11669	444	2	11336	430
		VERMONT	184	350	11035	4.0	435	44	14	12461	479	1	12347	469
		MASSACHUSETTS	17	43	10601	4.1	435	15	18	11669	437	2	11277	427
		RHODE ISLAND	1	3	16217	3.5	557	1	12	14377	515	3	15936	564
		CONNECTICUT	4	7	12293	3.9	471	4	10	11451	429	1	11915	455
		NEW YORK	1	1	13060	3.8	494							
		NEW JERSEY	1	1	14960	3.9	590	1	1	14900	554			
		PENNSYLVANIA	4	4	12370	3.8	463	2	6	11010	426	1	9216	382
		MISSOURI	1	2	8535	4.0	338	1	11	9140	360	2	9216	367
	889181	MAINE	5	7	11534	3.9	451	5	15	10121	396	1	10283	383
		NEW HAMPSHIRE	345	533	10912	4.0	433	314	15	11906	458	2	11738	452
		VERMONT	270	386	11511	4.0	458	126	16	12798	490	1	12823	495
		MASSACHUSETTS	17	24	11120	4.0	436	15	15	12404	472	1	12591	479
		RHODE ISLAND	6	9	12426	3.9	482	6	17	11572	455	2	11770	451
		CONNECTICUT	12	15	12824	3.9	500	11	20	13042	502	1	13064	510
		NEW YORK	1	1	7370	3.4	253	1	9	11800	370	1	12688	438
		PENNSYLVANIA	1	1	12000	3.9	471							
	976472	MAINE	1	1	11180	3.8	428	1	17	8500	320	1	8273	315
		NEW HAMPSHIRE	192	286	11811	3.9	458	174	15	11977	461	1	11817	454
		VERMONT	102	142	11862	3.8	453	47	19	11949	456	1	12145	462
		MASSACHUSETTS	9	13	10837	3.9	415	8	11	10370	390	1	10566	397
		RHODE ISLAND	4	4	11130	3.8	427	4	21	11290	452	1	11401	440
		CONNECTICUT	1	1	13250	3.8	499	1	32	14270	657	1	15794	562
		NEW JERSEY	1	3	13083	3.7	480							
	1011980	MAINE	3	3	12337	4.1	511	3	11	12830	555	1	10775	423
		NEW HAMPSHIRE	114	126	12634	3.9	489	113	20	12020	472	1	12339	476
		VERMONT	77	86	13065	3.9	510	73	21	12456	491	1	12508	493
		MASSACHUSETTS	4	4	13298	4.2	550	4	29	14313	550	1	13707	527
		CONNECTICUT	1	1	14980	4.3	641	1	61	15850	607	1	15522	598
	1025792	MAINE	1	2	11585	4.1	472	1	7	14650	572	2	14018	544
		NEW HAMPSHIRE	147	257	11431	3.8	433	123	15	11633	449	2	11466	436
		VERMONT	64	124	11288	3.8	426	13	19	12947	486	1	12555	468
		MASSACHUSETTS	5	9	13308	3.9	513	5	15	11142	419	2	11094	430
		RHODE ISLAND	2	2	14235	4.1	580	2	3	13965	536			
		CONNECTICUT	1	1	11800	3.5	415	1	14	15340	561	1	10867	412
		NEW YORK	1	2	13195	4.0	518	1	39	12640	499	2	13669	535
		NEW JERSEY	1	1	14560	3.5	511	1	53	11600	431	1	11042	411
	1032815	NEW HAMPSHIRE	33	34	11734	3.8	447	32	16	12040	470	1	11742	456
		VERMONT	18	19	11124	3.8	425	17	22	11964	472	1	12250	473
		MASSACHUSETTS	2	2	11550	4.0	468	2	31	11650	429	1	11369	426
		CONNECTICUT	2	2	12875	3.3	403	2	6	13065	500	1	12650	494
	1034472	MAINE	1	1	11960	3.6	456	1	11	13140	517	1	13320	525
		NEW HAMPSHIRE	133	208	11605	3.9	449	126	18	11721	455	2	11681	453
		VERMONT	59	88	11532	3.9	450	26	19	12153	482	1	12286	484
		MASSACHUSETTS	10	22	10854	4.1	443	9	12	11765	446	2	11674	446
		RHODE ISLAND	1	2	13150	3.8	498							
		CONNECTICUT	2	5	12910	3.8	483	2	15	13448	498	3	13872	515
		NEW JERSEY	1	2	11915	4.2	495	1	58	14585	594	1	14235	594
	1038591	MAINE	6	13	12257	3.6	449	5	9	11798	464	2	10941	426
		NEW HAMPSHIRE	197	317	12055	3.9	466	181	15	11996	465	2	11798	453

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY DAUS. NO.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	AV. RECORDS NO.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
		VERMONT	87	138	11681	3.9	452	41	20	12647	482	1	12687	483	
		MASSACHUSETTS	10	21	12162	4.1	496	10	9	12235	466	1	12255	474	
		CONNECTICUT	3	9	11648	3.7	430	3	9	12554	461	2	11379	411	
		NEW YORK	3	4	11638	3.5	399	1	4	10300	361	1	11303	416	
		CALIFORNIA	1	1	18210	3.4	624	1	42	15420	562				
	1085462	MAINE	1	1	13640	3.6	491	1	15	11280	483	1	10955	463	
		NEW HAMPSHIRE	84	96	12228	3.8	459	79	17	12317	475	1	12519	484	
		VERMONT	34	38	13029	3.8	487	27	18	12380	494	1	11846	480	
		MASSACHUSETTS	2	2	10185	4.2	422	2	18	14010	551	1	13560	524	
		CONNECTICUT	2	2	11810	3.6	419	2	34	14130	539	1	13800	522	
	1158569	NEW HAMPSHIRE	60	77	11390	4.0	453	56	21	11583	441	1	11338	441	
		VERMONT	36	44	11301	3.9	439	22	27	11836	451	1	11633	448	
		MASSACHUSETTS	6	6	12045	4.0	483	5	18	11496	443	1	11930	469	
		RHODE ISLAND	1	1	12220	3.8	461	1	113	11160	421				
		CONNECTICUT	1	1	16910	3.3	562	1	5	14810	464	1	17647	640	
	1181014	NEW HAMPSHIRE	8	9	12789	3.9	508	8	15	11960	482	1	11822	468	
		VERMONT	2	2	11965	4.0	474	1	1	14460	542	1	15140	595	
	1207354	NEW HAMPSHIRE	20	26	12282	3.8	469	16	11	12127	471	1	11523	448	
		VERMONT	10	11	11180	3.6	397	4	16	12055	436	1	12266	438	
	1229162	NEW HAMPSHIRE	41	50	11834	4.0	469	40	17	12050	472	1	12073	466	
		VERMONT	30	36	13546	4.1	552	29	24	13308	525	1	13135	515	
		CONNECTICUT	2	2	11725	4.1	485	2	5	12230	443	1	12802	477	
		NEW YORK	1	1	14200	4.4	624	1	2	14170	476				
	1232453	NEW HAMPSHIRE	28	30	12376	3.8	470	28	17	12426	481	1	12364	473	
		VERMONT	10	12	12666	3.8	479	8	15	13311	546	1	12836	512	
	1269970	NEW HAMPSHIRE	4	4	12898	4.1	539	4	37	12525	480	1	12353	487	
		VERMONT	1	1	12540	4.1	515	1	22	12010	424	1	12709	449	
JER.	403320	NEW HAMPSHIRE	35	89	7897	5.3	416	17	12	7491	391	2	7762	404	
		VERMONT	88	206	7318	5.3	390	1	2	7560	428	1	8604	426	
		MASSACHUSETTS	1	4	5620	5.8	328								
		CONNECTICUT	2	3	9813	5.1	501								
		NEW YORK	4	9	6818	5.2	357								
	444998	NEW HAMPSHIRE	11	23	7842	5.5	429	3	21	7929	406	3	8776	433	
		VERMONT	51	96	7653	5.3	404	5	7	7959	398	1	7437	379	
	448370	WASHINGTON	1	1	8320	5.5	456								
		OREGON	1	1	9126	5.0	455								
	455676	NEW HAMPSHIRE	45	57	7830	5.6	440	19	12	7993	417	1	8283	426	
		VERMONT	56	93	7581	5.6	421	20	20	8304	432	2	8587	443	
		CONNECTICUT	1	3	9540	5.4	510	1	3	9080	514	3	8128	437	
	478523	NEW HAMPSHIRE	27	45	8293	5.1	422	17	18	8566	465	1	8708	476	
		VERMONT	54	72	8611	5.1	444	25	23	8604	458	1	8565	412	
		MASSACHUSETTS	1	1	6070	5.1	311	1	5	5460	272	1	5995	294	
	480642	NEW HAMPSHIRE	73	149	8843	5.2	455	37	11	8669	457	2	8648	448	
		VERMONT	132	205	8848	5.0	438	67	13	8371	433	1	8630	429	
		MASSACHUSETTS	2	4	6869	4.9	339	1	5	5360	262	1	5995	294	
		NEW YORK	2	9	8650	5.1	439								
	508401	VERMONT	4	4	7540	5.6	406	3	7	9220	495	1	9541	506	
	509855	NEW HAMPSHIRE	28	58	8016	5.2	416	11	10	7793	407	2	8193	422	
		VERMONT	57	108	8391	5.3	446	18	20	8617	460	1	8413	431	
		RHODE ISLAND	1	1	7220	4.9	355								
		CONNECTICUT	1	1	9270	5.3	491					1	13527	513	
	514980	NEW HAMPSHIRE	12	14	8707	5.3	458	7	16	8326	449	1	8739	466	
		VERMONT	35	40	8241	5.4	447	22	20	8473	442	1	8513	448	
		RHODE ISLAND	1	1	9080	5.1	460								
	522499	NEW HAMPSHIRE	11	11	9148	5.4	487	8	10	8803	445	1	8562	446	
		VERMONT	28	30	9184	5.2	477	20	22	8204	432	1	8523	447	
		NEW YORK	1	1	9800	5.3	517								
	524368	NEW HAMPSHIRE	8	10	6558	5.6	367	4	12	7505	405	1	7728	406	
		VERMONT	15	19	6930	5.1	346	2	13	6795	337	1	6251	307	
	536826	NEW HAMPSHIRE	3	10	11468	4.9	557	2	28	11753	582	1	11952	593	
		VERMONT	9	12	8367	5.0	415	8	25	8356	440	1	8978	465	
	540127	NEW HAMPSHIRE	6	11	7182	5.3	381	4	11	8808	458	1	9533	463	
		VERMONT	30	45	8109	5.3	432	23	21	8245	440	2	8658	454	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.		
									NO.	RECORDS	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
005	AYR.	552352	NEW HAMPSHIRE	14	21	8027	4.9	395	11	16	8682	439	1	8576	437
			VERMONT	32	56	9083	5.4	492	25	20	8772	471	1	8694	456
			PENNSYLVANIA	1	1	6710	4.9	331							
		572375	NEW HAMPSHIRE	1	1	3760	5.3	198							
		572789	NEW HAMPSHIRE	4	4	7115	5.6	395	1	5	4930	190	1	8208	453
			VERMONT	2	2	16460	5.2	703	2	20	8615	465	1	9832	517
			MASSACHUSETTS	1	1	5940	5.7	339	1	3	5140	246	1	5995	294
		98368	PENNSYLVANIA	3	9	7900	3.8	307	3	12	9057	364	3	8982	364
	GUER	514865	NEW HAMPSHIRE	1	1	9550	4.6	436	1	19	7880	388	1	8829	424

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY NO.	AV. MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
000	GUER	256795	VERMONT	5	13	6571	4.8	312							
001	HOL.	712122	VERMONT	4	15	10388	3.6	373							
		943462	VERMONT	45	55	11118	3.7	409	42	13	11044	430	1	11263	431
	JER.	392869	VERMONT NEW JERSEY	27 1	86 1	7187 5870	5.6 5.5	397 321							
		395583	VERMONT MASSACHUSETTS	54 6	113 22	7465 7593	5.0 5.2	375 394	4 2	21 15	8495 7887	444 406	2 5	8841 7867	422 398
		398690	VERMONT	3	4	7375	5.1	376							
		417074	VERMONT	2	2	7215	4.9	350							
		435759	VERMONT MASSACHUSETTS	11 1	28 1	7733 9140	5.2 5.8	404 530							
		441190	VERMONT	2	12	6667	5.7	385							
		445174	VERMONT MASSACHUSETTS CONNECTICUT	18 1 1	54 2 1	8254 5600 8150	5.2 5.6 4.9	426 314 401	1	4	9603	484	3	9229	469
		447333	VERMONT	7	26	7944	5.0	397	2	2	9343	489	5	8642	480
		458311	MAINE VERMONT MASSACHUSETTS	1 161 35	2 261 56	8170 7550 8141	6.4 5.3 5.2	520 395 423	39 11	14 12	8259 8547	431 444	1 1 1	9875 8810 8534	508 446 424
		460789	MAINE VERMONT MASSACHUSETTS NEW YORK	1 64 34 3	1 101 67 5	8430 6964 7810 9009	4.7 5.0 4.9 5.4	395 345 382 481	1 16 12 1	16 21 13 84	8000 8083 8506 10060	419 422 453 522	1 1 2 2	8131 8421 8458 10115	435 420 442 530
		465493	VERMONT MASSACHUSETTS CONNECTICUT	44 3 1	65 5 1	6800 8549 7780	4.9 5.1 4.7	334 436 369	4 2	18 9	8755 8362	444 450	1 1	8975 8551	439 452
		465661	VERMONT	7	22	7314	5.4	393	1	28	8850	446	1	9352	468
		465968	NEW HAMPSHIRE VERMONT	4 1	10 1	7645 5450	5.9 5.8	452 319	3	23	9713	547	2	9133	506
		467002	VERMONT MASSACHUSETTS	39 5	62 6	8095 6007	5.3 5.1	423 301	10	15	8384	446	2	9185	467
		467010	VERMONT MASSACHUSETTS CONNECTICUT	37 4 2	61 6 4	6878 8087 7878	5.2 5.3 5.3	355 413 416	3 1	18 21	9131 7455	475 394	2 1	9702 7041	508 372
		468054	VERMONT MASSACHUSETTS CONNECTICUT NEW YORK	23 6 1 1	62 14 2 3	7206 7347 7460 7347	5.2 5.6 5.8 4.9	373 413 427 362	4 1	16 21	7963 7435	415 390	2 1	8456 7041	453 372
		475700	VERMONT MASSACHUSETTS	13 3	36 7	7639 6705	4.8 5.8	369 369	1 1	21 13	8810 6313	432 332	1 3	9014 6893	452 376
		478521	VERMONT MASSACHUSETTS	5 1	7 1	7962 7080	5.3 5.0	416 354	5	16	8317	439	1 1	8405 9036	449 426
		483908	VERMONT	6	15	7663	5.7	429	1	44	9630	541	1	9439	538
		487046	VERMONT GEORGIA FLORIDA	2 1 1	2 1 1	6835 7380 7050	4.2 6.0 5.5	298 441 389	2	3	9935	400	1	9478	416
		490860	VERMONT MASSACHUSETTS	2 1	5 4	7118 7275	5.6 5.8	389 426							
		491725	VERMONT	16	26	7231	5.6	403	10	38	7767	445	1	8039	465
		492160	VERMONT MASSACHUSETTS	59 3	72 6	8543 7129	5.1 5.0	433 344	38 1	16 13	8363 7190	435 390	1 1	8682 9925	445 441
		492353	VERMONT	13	28	7239	5.5	399	2	10	7730	407	1	8388	439
		495943	NEW HAMPSHIRE VERMONT MASSACHUSETTS	3 81 32	6 101 49	9452 7548 8418	5.5 5.4 5.4	511 409 452	42 16	16 15	8183 8784	426 450	3 1 1	11819 8676 8771	488 441 444

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUDY, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREE0	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY		CONTEMPORARY		AV.		YEARLY HERO		AV. FAT LB.
									NO.	RECORDS	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.		
002	AYR.	518291	VERMONT	10	17	7160	5.1	367		6	11	7696	377	2	7960	386	
		547773	VERMONT	5	5	8318	5.1	421		5	21	9162	478	1	9960	520	
		555184	VERMONT MASSACHUSETTS	49 37	68 44	8152 8068	4.9 5.2	401 415		28 24	18 12	8640 7841	444 421	1 1	9188 9006	457 444	
		46502	VERMONT MASSACHUSETTS PENNSYLVANIA	9 1 3	35 1 15	8385 6350 9821	4.3 4.7 4.3	359 300 431									
		47885	NEW HAMPSHIRE	3	3	6363	4.0	258							2	8960	372
		53833	NEW HAMPSHIRE VERMONT CONNECTICUT NEW YORK	1 4 5 3	1 25 25 9	5650 11244 10744 9558	4.5 4.1 4.0 4.0	255 456 429 382		1 3	1 8	12587 9239	519 377		3	9555	392
		56255	VERMONT	1	1	11250	4.0	451									
		63406	VERMONT NEW YORK OHIO	5 1 10	20 2 17	8042 9305 8627	4.3 4.0 4.0	343 369 342									
		219946	VERMONT RHODE ISLAND CONNECTICUT NEW YORK	34 2 1 7	92 4 2 19	7740 7232 9495 8195	4.5 4.4 4.0 4.4	350 320 378 360									
		282648	VERMONT	26	71	7148	4.7	337									
		321444	MASSACHUSETTS	1	2	9480	4.7	435									
		734441	VERMONT	14	33	9205	3.7	341									
		764632	NEW HAMPSHIRE VERMONT NEW YORK	1 19 1	5 68 3	13004 9824 13140	4.0 3.9 3.5	525 384 463		1	8	12206	455	2	12546	457	
		778171	NEW HAMPSHIRE VERMONT	1 7	10 31	12109 10802	3.6 3.9	433 414		1	9	12106	451	5	11953	443	
		794309	VERMONT	2	13	11461	3.8	429									
908515	VERMONT	6	34	13691	3.6	496											
003	JER.	356655	VERMONT	2	8	6791	5.0	337									
		386941	VERMONT	4	14	6577	5.1	337									
		399234	VERMONT	8	28	6548	5.1	334									
		402762	VERMONT	1	4	9033	4.9	448									
		409690	VERMONT	5	20	8423	5.5	462									
		435296	VERMONT	1	1	4940	4.6	229									
		446021	VERMONT	1	5	7394	4.5	332									
		446888	VERMONT	4	13	8545	5.1	437									
		283110	VERMONT	3	7	4949	5.1	251									

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY NO. RECORDS	MILK LB.	FAT LB.	YEARLY RECORDS NO.	MILK LB.	FAT LB.
000	AYR.	50470	MAINE VERMONT MASSACHUSETTS	16 2 1	34 3 4	10476 6078 10493	4.0 4.1 4.1	414 253 425						
	GUER	240982	MASSACHUSETTS CONNECTICUT	11 1	30 3	7053 9760	4.8 4.8	340 472	6	6	8526	360	2	8487 366
		280947	MASSACHUSETTS	1	1	6990	4.6	319						
	HOL.	716598	MASSACHUSETTS CONNECTICUT	11 1	25 3	9931 10380	3.8 3.3	374 348						
		746498	MASSACHUSETTS	22	61	13466	3.6	483	2	14	15245	547	2	15473 550
001	AYR.	52394	MAINE NEW HAMPSHIRE VERMONT MASSACHUSETTS CONNECTICUT	2 3 1 4 3	2 19 1 5 14	7095 8547 6260 9334 8836	4.0 3.9 3.8 4.2 4.4	285 338 239 390 389	3	5	8203	332	4	7838 316
		59047	MAINE NEW HAMPSHIRE MASSACHUSETTS CONNECTICUT NEW YORK IOWA VIRGINIA NORTH CAROLINA	3 18 16 31 1 1 1 2	4 50 39 88 4 2 2 5	5630 8925 9327 9503 13378 9165 7095 8023	4.4 4.1 4.0 4.0 3.6 3.9 4.1 3.9	247 363 376 384 482 357 294 304						
		61046	MAINE NEW HAMPSHIRE VERMONT MASSACHUSETTS CONNECTICUT NEW YORK IOWA NORTH CAROLINA	7 40 6 10 10 1 1 1	15 126 10 32 31 3 4 1	8485 8878 8753 8688 9300 7953 7253 9300	4.4 4.0 4.1 4.1 4.2 3.8 4.0 4.1	369 353 356 353 388 303 293 382	2	9	9243	394	3	9922 419
		62233	MAINE NEW HAMPSHIRE VERMONT MASSACHUSETTS CONNECTICUT NEW YORK MINNESOTA NORTH CAROLINA	11 18 39 22 16 1 1 1	27 52 130 57 42 4 1 7	8106 9464 9127 8863 8917 11110 8350 7939	4.1 4.1 4.0 4.1 4.1 4.1 3.9 3.9	327 385 369 363 361 457 326 313	9	9	9048	375	2	8851 360
		62585	MASSACHUSETTS	3	10	9425	4.1	387						
		62613	MAINE NEW HAMPSHIRE VERMONT MASSACHUSETTS RHODE ISLAND CONNECTICUT NEW YORK DELAWARE	7 12 12 22 2 5 1 1	11 19 27 43 4 9 2 1	6736 7846 8963 8535 10993 8859 6090 8040	3.8 4.1 4.1 4.2 4.0 4.1 3.9 4.7	257 321 370 360 421 363 239 378	7	6	7947	324	2	8003 320
		63144	MAINE NEW HAMPSHIRE VERMONT MASSACHUSETTS CONNECTICUT NEW YORK OHIO MINNESOTA	2 12 1 26 7 1 1 1	3 30 7 60 13 3 1 4	9513 8044 6971 8801 8745 11197 6650 7723	4.1 4.2 3.9 4.3 4.0 4.3 3.7 4.0	391 340 273 376 349 480 249 307	1	11	10790	447		
		63147	MAINE NEW HAMPSHIRE VERMONT MASSACHUSETTS RHODE ISLAND CONNECTICUT NEW YORK NEW JERSEY IOWA DELAWARE NORTH CAROLINA GEORGIA FLORIDA	43 117 88 150 13 40 18 1 1 15 5 3 1	70 229 151 300 18 80 44 3 3 20 5 9 1	9382 9680 9833 9680 10234 8998 11045 12873 10580 9129 7640 9326 9330	4.1 4.1 4.1 4.2 4.1 4.2 4.2 4.0 4.0 4.0 3.8 4.0 3.8	382 392 403 403 413 378 457 516 427 364 289 368 352	41	13	9161	365	2	9214 377
		63426	MAINE NEW HAMPSHIRE VERMONT	7 30 28	9 67 56	8841 8274 9368	4.2 4.2 4.2	367 347 396	6	11	8267	370	1	8446 370

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO		
									NO. OAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	AV. FAT LB.
			MASSACHUSETTS	36	79	9135	4.2	382	26	12	9103	374	2	9096	375
			CONNECTICUT	22	48	9441	4.1	365	8	20	9155	365	2	9472	377
			NEW YORK	5	11	9177	4.0	368	1	9	7745	305	2	7434	296
			PENNSYLVANIA	2	7	10556	4.1	430	1	17	9362	401	3	9334	398
			DELAWARE	11	27	7831	4.2	333	5	10	8242	343	2	8861	363
			OKLAHOMA	1	3	6590	3.9	254							
			IOAHO	1	1	11590	3.6	422							
		64885	MAINE	6	10	6457	4.1	262	1	10	8488	357	2	8933	378
			NEW HAMPSHIRE	7	25	8895	4.0	359	3	6	9838	405	4	9656	407
			VERMONT	3	8	8124	3.9	319	1	4	7610	294	1	8469	337
			MASSACHUSETTS	9	24	7349	4.1	301	6	9	9755	389	2	9955	404
			CONNECTICUT	4	14	8832	4.0	351	1	17	8978	370	5	8986	380
			MINNESOTA	1	1	7050	4.2	299							
		65548	NEW HAMPSHIRE	1	9	11770	3.8	448	1	14	9567	393	6	9489	381
			VERMONT	20	37	10377	4.1	424	3	89	11910	465	1	10508	422
			MASSACHUSETTS	3	13	9817	4.2	409	3	9	9814	384	2	10039	395
			CONNECTICUT	1	8	11533	4.3	494							
		65599	MAINE	1	1	6880	4.6	314							
			MARYLAND	1	3	6520	4.4	283	1	27	8753	338	1	8437	328
		65610	VERMONT	2	3	7835	4.0	307							
		67174	NEW HAMPSHIRE	12	39	9254	3.9	364	6	8	8918	375	3	9192	377
			VERMONT	3	4	8712	3.9	344							
			MASSACHUSETTS	10	19	9006	3.9	351	3	10	9521	381	1	9185	368
			CONNECTICUT	4	11	10604	4.0	422	3	15	9653	388	2	9062	370
		68188	MAINE	1	1	8590	4.2	361							
			NEW HAMPSHIRE	5	9	6730	4.1	278	1	3	10698	436	2	8851	376
			VERMONT	2	2	7465	4.2	305							
			MASSACHUSETTS	8	9	7534	4.3	327							
		70259	MAINE	6	16	8213	4.2	341	6	18	8403	336	3	9132	360
			NEW HAMPSHIRE	7	16	8186	4.3	349	6	10	8998	372	3	8369	343
			VERMONT	10	13	8330	4.0	336							
			MASSACHUSETTS	15	36	8769	4.3	376	15	14	9204	378	2	9168	379
			RHODE ISLAND	1	2	11020	3.8	414	1	21	10175	402	1	9821	400
			CONNECTICUT	6	16	9021	4.2	374	5	14	8948	351	2	9029	358
			NEW YORK	3	4	16057	4.1	634	1	29	11790	461	1	11707	463
			DELAWARE	2	2	9610	4.1	394	2	6	10760	448	1	10551	431
			MARYLAND	1	3	10470	3.9	412	1	23	10710	392	2	11549	417
			NORTH CAROLINA	2	2	8625	4.4	378							
		70368	MAINE	2	5	8812	4.4	381	1	6	9500	385	2	8933	355
			NEW HAMPSHIRE	4	12	8762	4.0	352	3	11	9785	391	3	9153	330
			VERMONT	1	1	9350	4.1	381							
			MASSACHUSETTS	11	23	7245	4.3	307	9	8	7725	320	2	7988	330
			CONNECTICUT	3	13	8577	4.2	361	1	22	8823	358	7	8812	353
			DELAWARE	1	3	8640	4.1	360	1	21	6453	243	3	5806	219
		70760	MAINE	10	20	8237	4.1	338	8	11	8958	370	2	9600	398
			NEW HAMPSHIRE	15	43	9320	4.3	395	11	21	8965	371	3	8642	357
			VERMONT	9	19	8199	4.4	355							
			MASSACHUSETTS	13	32	8443	4.4	366	13	12	8532	355	2	8569	360
			RHODE ISLAND	1	5	10418	4.2	438	1	1	12080	483			
			CONNECTICUT	23	83	8904	4.3	381	14	12	9761	402	4	9541	392
			NEW YORK	1	1	10650	4.5	486							
			DELAWARE	3	12	9685	4.1	401	3	13	8341	345	4	9613	386
			MARYLAND	1	4	10185	4.4	450	1	28	10403	422	4	9857	404
			NORTH CAROLINA	2	4	7445	4.0	300	1	11	8040	337	2	8622	351
		71191	MAINE	4	8	7327	4.0	286	1	2	8570	367	2	7864	347
			NEW HAMPSHIRE	14	28	7534	4.0	303	7	31	8837	370	1	8258	349
			VERMONT	5	7	8407	3.9	330							
			MASSACHUSETTS	17	31	8534	4.0	336	6	17	9069	369	2	9806	395
			CONNECTICUT	7	15	8822	3.8	333	2	20	10645	427	2	10151	413
			NEW YORK	4	8	8080	3.8	312							
		71763	MAINE	7	19	8052	4.2	342	5	8	9181	367	2	9445	388
			NEW HAMPSHIRE	15	35	8485	4.4	372	5	6	8521	350	3	8383	353
			VERMONT	6	10	8577	4.1	345	1	4	7600	304	1	7630	310
			MASSACHUSETTS	27	66	8252	4.3	356	14	10	9114	376	2	8961	366
			CONNECTICUT	17	36	8589	4.3	367	6	13	9316	369	2	8991	365
			NEW YORK	2	6	8526	4.8	400							
			MARYLAND	1	3	8553	4.6	397	1	9	9267	377	1	8284	340
			COLORADO	1	1	12010	4.4	531							
		73293	MAINE	14	26	8581	4.2	360	10	9	9253	367	2	8564	363
			NEW HAMPSHIRE	20	31	9084	4.1	378	14	24	9600	402	2	9090	377
			VERMONT	27	56	8479	4.2	358	2	2	9295	386	4	10707	439
			MASSACHUSETTS	81	161	8848	4.1	363	68	15	9621	395	2	9393	386
			RHODE ISLAND	4	12	10385	4.1	427	3	22	11201	461	2	11024	455

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY DAUS. NO.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	AV. RECORDS NO.	YEARLY MILK LB.	HERD LB.	AV. FAT LB.
		CONNECTICUT	25	48	8883	4.1	365	9	15	9401	388	2	9498	396	
		NEW YORK	4	7	7348	4.1	300								
		IOWA	2	3	10523	4.2	436	2	4	8195	337				
		KANSAS	1	1	11580	4.1	471								
		DELAWARE	11	18	7377	3.9	289	7	21	6747	261	2	6623	256	
		VIRGINIA	1	1	7000	4.2	295								
	74021	MAINE	25	40	9156	4.2	379	20	11	9649	390	2	9432	387	
		NEW HAMPSHIRE	47	84	9536	4.2	397	43	16	9463	388	2	9846	402	
		VERMONT	40	67	8982	4.1	370	19	17	9856	399	2	9340	380	
		MASSACHUSETTS	72	118	9374	4.0	377	64	16	9699	401	2	9879	403	
		RHODE ISLAND	7	13	10361	4.0	409	6	18	10604	426	2	10290	411	
		CONNECTICUT	10	16	8591	4.0	345	9	23	9066	368	1	9193	374	
		NEW YORK	4	7	10443	4.0	417	3	28	10383	428	1	10953	448	
		IOWA	1	1	6820	4.8	326	1	4	10780	432	1	10529	419	
		DELAWARE	16	36	8184	4.0	323	14	15	8409	327	2	8668	340	
		MARYLAND	1	2	9765	4.1	403	1	43	9635	399	2	8530	340	
		VIRGINIA	1	1	6620	4.2	279								
		NORTH CAROLINA	5	9	9417	3.9	368	4	18	8673	347	1	8905	352	
	76613	MAINE	8	10	11427	3.9	451	8	9	8843	368	1	8930	365	
		NEW HAMPSHIRE	36	97	9241	4.1	379	32	22	9092	378	3	9176	378	
		VERMONT	40	83	9759	4.1	399	13	12	9652	397	2	9479	383	
		MASSACHUSETTS	84	204	9833	4.2	408	72	15	9507	396	2	9587	395	
		RHODE ISLAND	8	20	10463	4.2	442	7	11	10124	440	2	10105	436	
		CONNECTICUT	79	183	10767	4.1	437	51	12	9855	402	2	10154	415	
		NEW YORK	5	10	9180	4.3	397	1	17	12920	495				
		NEW JERSEY	1	1	10920	4.4	484								
		PENNSYLVANIA	1	5	12096	3.8	460	1	8	8934	362	4	10001	399	
		OHIO	2	5	5862	4.1	234								
		IOWA	1	1	11730	3.7	437	1	17	8530	351	1	8993	364	
		KANSAS	1	2	10565	4.0	415								
		DELAWARE	7	15	7427	4.0	294	7	16	7300	278	2	6643	255	
		MARYLAND	2	5	9242	4.5	414								
		VIRGINIA	1	1	8540	4.4	372	1	12	9550	420				
		WEST VIRGINIA	1	2	9750	4.1	399	1	13	9350	367	2	9134	364	
		NORTH CAROLINA	1	1	8800	4.0	350	1	38	7050	290	1	8240	337	
	76831	MAINE	1	6	10590	4.2	446	1	7	8123	340	3	8687	357	
		NEW HAMPSHIRE	3	11	9194	4.3	393								
		MASSACHUSETTS	5	21	9366	4.5	414	3	10	9772	402	3	10132	430	
		CONNECTICUT	1	5	7954	4.3	337	1	2	10282	422	1	10137	436	
	78114	MAINE	9	17	8078	4.1	329	9	21	9633	392	2	9369	384	
		NEW HAMPSHIRE	6	14	9107	4.2	379	6	22	10291	419	2	10038	409	
		VERMONT	14	27	10162	4.1	416	7	9	9875	402	2	9600	387	
		MASSACHUSETTS	22	43	9057	4.0	363	22	10	9454	380	2	9705	390	
		RHODE ISLAND	3	6	10910	4.0	436	1	10	10815	456	1	10257	429	
		CONNECTICUT	16	32	9378	4.0	375	12	16	10004	407	2	9709	401	
		DELAWARE	5	6	7189	4.0	288	3	12	7723	308	1	7416	284	
	79186	NEW HAMPSHIRE	1	2	9200	3.8	347	1	111	10225	410	2	9663	394	
		VERMONT	2	2	9040	4.1	367	1	8	9090	372	1	6911	280	
		MASSACHUSETTS	3	5	8470	3.9	328	2	15	10785	428	1	9516	393	
		DELAWARE	2	2	8110	4.6	367	2	11	10850	471	1	11576	459	
		NORTH CAROLINA	1	2	8625	4.4	377	1	11	8060	327	1	6834	275	
	80379	MAINE	7	8	8077	4.2	341	7	10	9098	377	1	9359	385	
		NEW HAMPSHIRE	19	29	9264	4.0	370	19	13	9920	410	1	9558	394	
		VERMONT	8	9	9383	4.0	375	3	30	9872	404	1	9948	402	
		MASSACHUSETTS	24	34	9301	4.1	385	23	19	9852	417	1	9880	410	
		RHODE ISLAND	11	14	10465	3.9	409	9	19	10349	415	1	10763	419	
		CONNECTICUT	14	22	9201	4.0	366	14	20	9326	381	2	9909	404	
		NEW YORK	1	2	9635	3.8	359	1	15	8970	363	1	8589	364	
		VIRGINIA	1	1	9730	3.8	371	1	21	9790	425				
	82620	MAINE	3	3	7163	4.0	284	3	15	7903	305	1	8982	351	
		NEW HAMPSHIRE	4	5	11710	4.1	474	4	33	10815	436	1	10551	427	
		VERMONT	6	6	10015	4.2	426	6	32	9853	405	1	9723	403	
		MASSACHUSETTS	5	5	9306	4.4	414	5	14	9918	409	1	9924	407	
		CONNECTICUT	2	2	9260	4.1	378	2	17	10055	416	1	10650	440	
		IOWA	1	1	9230	4.5	415	1	28	14620	798	1	8949	366	
		VIRGINIA	6	6	9935	4.6	452	6	12	9772	424				
		WASHINGTON	1	1	9240	4.1	374	1	23	8160	329	1	8829	363	
	82628	MAINE	10	18	8634	4.1	347	10	13	8690	349	1	9276	371	
		NEW HAMPSHIRE	11	27	8886	4.2	368	10	22	10115	420	2	10006	413	
		VERMONT	13	17	8556	4.3	365	6	20	9772	400	1	9819	393	
		MASSACHUSETTS	9	12	9086	4.1	371	8	14	9978	428	1	9079	385	
		RHODE ISLAND	2	3	8390	4.2	348	2	27	9555	377	2	10459	408	
		CONNECTICUT	10	16	8796	4.1	357	9	17	9641	395	2	10055	408	
		NEW JERSEY	1	2	8395	4.0	338					2	9461	366	
		DELAWARE	3	3	8683	4.2	370	2	14	11180	469	1	10279	426	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAS.	CONTEMPORARY RECORDS NO.	AV. MILK LB.	FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
	84223	NEW HAMPSHIRE	1	1	10990	4.0	438	1	11	11710	490	1	10584	441
		VERMONT	3	4	10860	3.9	422	2	18	10610	418	2	10151	398
		RHODE ISLAND	3	5	9917	4.1	404	3	24	9693	390	1	9389	376
		CONNECTICUT	5	7	9991	3.8	376	5	18	9557	391	1	9513	385
	86390	MAINE	19	30	8710	4.3	374	19	9	9550	387	1	9346	378
		NEW HAMPSHIRE	60	73	8904	4.3	381	58	13	9640	396	1	9905	406
		VERMONT	42	49	9247	4.3	397	23	20	10054	418	1	10066	421
		MASSACHUSETTS	75	93	9171	4.3	391	70	16	9978	412	1	9954	409
		RHODE ISLAND	12	16	9102	4.2	379	12	16	9974	400	1	10326	411
		CONNECTICUT	58	75	8883	4.2	369	53	20	9682	394	1	9940	407
		NEW YORK	5	6	8963	4.0	359	4	19	10260	424	1	10682	437
		NEW JERSEY	2	4	10560	4.6	480							
		PENNSYLVANIA	2	3	9428	4.4	408	2	16	10445	436	1	9990	408
		MINNESOTA	2	2	11510	4.6	520	2	15	10325	396	1	9652	393
		IOWA	5	6	9183	4.5	413	4	20	11584	526	1	9124	366
		VIRGINIA	1	1	13390	4.5	601	1	21	9620	414			
	86898	MAINE	10	14	8536	4.1	345	10	23	9126	361	1	9994	400
		NEW HAMPSHIRE	36	61	8542	4.0	344	28	18	9183	380	2	9026	369
		VERMONT	32	44	8921	4.1	363	12	10	8770	368	1	9075	387
		MASSACHUSETTS	54	88	9104	4.2	377	51	13	9677	392	2	9668	393
		RHODE ISLAND	8	17	10294	4.2	423	5	14	11408	478	2	10668	454
		CONNECTICUT	22	41	9072	4.0	364	18	17	10135	414	2	10434	426
		NEW JERSEY	3	6	9439	4.3	401							
		IOWA	1	2	5130	3.8	193	1	5	8620	338	2	8191	301
		DELAWARE	10	12	8188	3.8	317	9	13	8062	324	1	8705	341
		MARYLAND	1	1	9470	3.9	365							
		NORTH CAROLINA	2	4	8007	3.9	309	2	13	9082	353	2	8915	349
		GEORGIA	1	3	9673	3.9	382	1	1	12490	464			
	91883	MAINE	6	6	9878	4.4	432	6	11	10065	395	1	10224	421
		NEW HAMPSHIRE	17	17	9829	4.2	409	16	18	10376	423	1	10085	404
		VERMONT	10	11	8963	4.3	385	10	12	10412	427	1	10498	422
		MASSACHUSETTS	25	26	9348	4.3	397	23	17	10163	425	1	10127	421
		RHODE ISLAND	1	1	8620	4.4	376	1	14	11210	472	1	10998	457
		CONNECTICUT	15	16	9068	4.3	388	15	32	9353	376	1	9908	401
		NEW YORK	8	8	9135	4.3	387	8	28	11054	457	1	11512	475
		WISCONSIN	1	1	7250	4.2	308					1	11216	471
		IOWA	2	3	8746	4.6	401	1	11	11110	472	2	7783	449
	94423	MAINE	4	4	8090	4.2	338	4	10	9100	388	1	9744	409
		NEW HAMPSHIRE	4	4	9168	4.4	399	4	36	9878	395	1	10197	417
		VERMONT	33	41	9965	4.1	399	22	20	10121	405	1	10614	426
		MASSACHUSETTS	8	9	8224	4.1	344	7	13	9472	390	1	9906	405
		CONNECTICUT	5	6	6569	4.2	274	5	49	9614	403	1	10391	396
		NEW YORK	11	14	8898	4.2	373	9	15	9952	407	1	10153	418
		PENNSYLVANIA	30	53	7697	4.2	319	28	17	8674	362	2	8693	363
		OHIO	1	1	9920	3.9	389							
		INDIANA	1	2	7520	4.8	358							
		DELAWARE	1	1	7730	3.9	303	1	15	9770	424	1	10104	423
		MARYLAND	4	4	10343	4.1	423	4	62	11260	457	1	11036	447
		WASHINGTON	1	1	5770	4.2	244	1	17	10290	415	1	9875	410
GUER	257510	MASSACHUSETTS	3	9	7616	4.8	364	2	5	8464	374	2	8333	368
	258935	MAINE	1	4	8940	5.1	456	1	9	9773	420	1	9363	389
		NEW HAMPSHIRE	1	2	7950	4.8	383							
		VERMONT	2	7	7059	5.1	359							
		MASSACHUSETTS	33	86	8534	5.0	423	12	8	8778	427	2	8984	434
		RHODE ISLAND	2	2	8765	5.0	431							
		CONNECTICUT	4	7	7820	5.2	409							
		NEW YORK	1	3	9497	5.8	551							
	262919	VERMONT	8	13	7463	4.7	346							
		MASSACHUSETTS	49	125	7812	4.8	372	38	10	8898	410	2	8457	393
		CONNECTICUT	3	13	7389	4.9	359	2	15	8303	394	6	8363	401
	266149	MASSACHUSETTS	1	3	9107	4.6	420	1	17	10783	432	2	11620	495
	266583	NEW HAMPSHIRE	2	2	7775	5.0	360	2	4	8265	357	1	8251	370
		VERMONT	29	60	7355	4.8	353	4	13	7803	388	3	8359	404
		MASSACHUSETTS	115	273	8078	4.7	380	95	9	9292	411	2	9255	410
		CONNECTICUT	2	3	7268	4.9	371	2	14	8773	415	1	8099	389
		NEW YORK	2	8	7590	5.1	383	1	5	8970	405	1	10562	487
		KANSAS	1	1	8310	5.3	442	1	1	5230	168			
	280691	MAINE	6	24	7693	4.5	348	5	5	8349	393	1	7885	375
		NEW HAMPSHIRE	8	12	7441	4.9	363	1	11	8000	363	4	8232	381
		VERMONT	1	7	5720	4.4	253							
		MASSACHUSETTS	48	120	7676	4.7	359	28	9	8832	393	2	8920	401
		CONNECTICUT	1	1	13050	4.3	567	1	18	9950	480	1	10115	470
		NEW YORK	5	9	7378	4.8	357							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY NO. DAUS.	RECORDS NO.	MILK LB.	AV. FAT LB.	YEARLY HERD RECORDS NO.	MILK LB.	AV. FAT LB.
280954	VERMONT	1	3	9510	4.9	463								
	MASSACHUSETTS	14	42	9406	4.8	449		9	11	8802	410	2	9287	432
	RHODE ISLAND	1	3	9103	4.5	414		1	5	10125	448	2	9118	414
	CONNECTICUT	7	27	9415	4.6	427		6	12	10068	453	3	10086	457
	NEW MEXICO	1	5	10792	4.6	495								
290370	MASSACHUSETTS	6	11	7362	5.0	364								
299165	NEW HAMPSHIRE	1	3	7557	4.8	366		1	39	9507	426	3	8175	377
	VERMONT	47	100	7511	4.9	372		11	8	8617	417	2	9279	426
	MASSACHUSETTS	191	372	7611	5.0	378		183	13	9032	407	2	8843	400
	CONNECTICUT	2	4	6823	5.6	377		2	21	8868	421	2	8860	418
	NEW YORK	3	5	7340	4.6	335		2	5	9035	407	1	10279	492
299474	MASSACHUSETTS	14	32	8324	4.6	379		8	7	9292	409	2	9194	404
	CONNECTICUT	19	55	9477	4.7	439		10	8	9540	445	2	9107	425
	NEW YORK	1	4	7585	5.0	376								
300012	MASSACHUSETTS	5	19	9310	5.0	465		3	6	8897	416	2	9163	435
	CONNECTICUT	3	8	8601	4.9	419		2	4	10600	427	1	10328	425
318026	VERMONT	33	53	7376	4.6	339		6	18	9041	412	1	8876	400
	MASSACHUSETTS	143	323	7457	4.8	355		135	17	9053	411	2	8824	403
	CONNECTICUT	1	1	7520	4.8	362		1	10	8690	424	1	9657	485
	NEW YORK	1	1	7140	4.9	350		1	20	8440	386	1	10072	479
	FLORIDA	2	3	8103	4.7	370		2	38	9060	407	1	8448	383
319479	MASSACHUSETTS	16	47	8854	4.7	420		12	17	9728	462	3	9788	468
337117	NEW HAMPSHIRE	2	3	6170	5.5	334		1	9	9900	379	1	9516	399
	VERMONT	41	51	6586	4.8	315		11	15	8342	387	1	8698	416
	MASSACHUSETTS	80	212	8619	4.9	424		60	11	9482	430	2	9213	417
	NEW YORK	1	1	4930	4.4	215		1	19	6800	298	1	8197	351
338035	NEW HAMPSHIRE	1	3	9163	5.3	484		1	3	11590	434			
	VERMONT	8	12	5753	4.7	266		1	28	6820	303	2	7494	334
	MASSACHUSETTS	69	148	7163	4.8	343		65	19	8840	402	2	8831	402
	CONNECTICUT	1	2	7735	4.8	367		1	11	9445	436	2	9919	450
	FLORIDA	1	2	4905	4.9	239		1	76	7530	333	1	6159	262
345237	MASSACHUSETTS	3	7	7579	4.6	349		1	8	9830	484	4	10576	469
	FLORIDA	1	1	10660	4.1	435		1	39	8970	405			
353206	MAINE	2	3	6623	4.7	314		1	3	8220	413			
	NEW HAMPSHIRE	1	3	7907	4.7	372		1	9	10013	492	2	9887	469
	VERMONT	12	15	7220	4.7	341		9	20	8047	360	1	8572	388
	MASSACHUSETTS	56	114	7794	4.7	368		52	11	9584	447	2	9407	441
	CONNECTICUT	6	20	8500	5.0	425		5	11	10143	503	4	10107	488
	NEW YORK	1	1	8530	4.5	385								
	FLORIDA	1	1	5190	4.5	236		1	12	7220	318			
360369	VERMONT	9	21	8043	4.7	382		2	14	9720	449	2	9732	443
	MASSACHUSETTS	63	144	7446	4.7	349		41	9	8829	383	2	9070	397
	CONNECTICUT	3	5	7781	4.9	384								
	NEW YORK	2	2	6805	4.9	336								
	FLORIDA	1	1	6550	4.0	260		1	39	9080	409			
	TEXAS	1	1	8270	4.7	387		1	19	7500	343	1	8284	403
361493	NEW HAMPSHIRE	1	1	6690	4.5	301								
	VERMONT	14	26	8274	4.5	371		1	2	8508	421	1	8349	390
	MASSACHUSETTS	82	194	8124	4.7	379		81	15	8987	417	2	8671	404
	RHODE ISLAND	2	5	8517	4.5	382		2	11	10797	516	3	9643	456
	CONNECTICUT	2	4	8409	4.2	349		2	5	10050	425	3	8491	419
	NEW YORK	3	7	6808	4.7	315								
	NORTH CAROLINA	3	6	7680	4.3	330		3	82	8248	385	1	7547	353
	FLORIDA	1	1	7170	4.3	312		1	39	9060	408	1	8448	383
362469	VERMONT	1	1	7480	4.4	329								
	MASSACHUSETTS	15	53	7243	4.7	340		10	7	7634	357	3	7322	342
	RHODE ISLAND	1	3	11990	4.2	509		1	4	11050	538			
	CONNECTICUT	3	13	7143	4.5	321		3	19	8813	404	3	8243	387
362595	VERMONT	3	8	7651	4.9	370		3	14	9931	426	1	8720	387
	MASSACHUSETTS	17	33	8133	4.7	385		17	11	9140	427	2	9168	424
	CONNECTICUT	1	1	4630	4.5	208		1	1	9410	362	1	7586	349
365457	MAINE	1	3	8137	5.0	409		1	18	8390	436	1	9309	455
	NEW HAMPSHIRE	3	6	7215	4.8	347		3	5	10518	411	1	9516	399
	VERMONT	17	34	7639	4.8	361		3	19	8191	408	1	9396	435
	MASSACHUSETTS	119	245	8052	4.8	388		118	11	9378	416	2	9288	413
	RHODE ISLAND	2	6	9949	4.7	459		2	8	10193	470	3	9651	465
	NEW YORK	2	5	7389	5.1	373		1	9	9673	472	1	9178	453
	FLORIDA	3	3	8320	4.6	383		3	30	9437	421	1	8448	383

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPDRARY NO. ND.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
	366876	NEW HAMPSHIRE	1	1	6220	5.0	311							
		VERMONT	14	28	7206	4.8	343	8	12	8508	405	2	8658	408
		MASSACHUSETTS	47	82	7956	4.9	394	45	16	9821	446	2	9489	431
		CONNECTICUT	2	6	7114	4.9	347	2	17	8818	417	5	8591	417
	373404	VERMONT	16	29	7268	4.5	325	3	16	9310	430	1	9232	429
		MASSACHUSETTS	86	227	8227	4.6	378	73	13	9103	413	2	9139	415
	390189	NEW HAMPSHIRE	5	13	8764	4.6	397	2	11	9679	451	2	7292	348
		VERMONT	2	2	4515	4.2	190							
		MASSACHUSETTS	38	95	8450	4.7	396	14	8	8739	406	2	8536	409
		CONNECTICUT	1	1	8030	5.0	401							
	395615	VERMONT	3	3	6447	4.8	317							
		MASSACHUSETTS	13	30	7828	4.8	377	10	8	9491	423	2	9407	413
	408397	MASSACHUSETTS	5	16	8768	5.2	453	4	16	9117	424	3	9292	429
	426363	VERMONT	3	4	9225	4.5	420	3	13	10072	453	1	8873	362
		MASSACHUSETTS	17	18	8789	4.6	401	17	14	9145	435	1	9189	428
	500169	VERMONT	14	22	7676	4.6	353	14	15	8310	381	2	8964	412
		MASSACHUSETTS	40	56	7786	4.7	368	37	12	9269	410	1	9338	411
	512944	MASSACHUSETTS	11	11	8643	5.1	436	10	17	8927	419	1	9518	438
HOL.	730516	NEW HAMPSHIRE	3	9	10028	4.4	436	1	7	14103	515	5	11746	458
		VERMONT	91	172	10351	3.7	384	11	13	12615	478	2	12191	454
		MASSACHUSETTS	621	1400	10933	3.8	409	523	16	11498	427	2	11522	432
		RHODE ISLAND	5	12	13251	3.6	480	3	7	12188	443	3	12772	456
		CONNECTICUT	12	25	12003	3.7	447	10	14	12780	473	2	12185	450
		NEW YORK	4	7	9986	3.6	354							
	750275	VERMONT	3	4	8947	3.8	336	1	50	12070	447	1	11500	445
		MASSACHUSETTS	63	152	11534	3.6	413	51	16	12022	441	2	11949	443
	753848	MASSACHUSETTS	2	4	11517	3.3	378							
	768866	MAINE	11	32	13080	4.0	511	6	14	13520	504	3	12186	474
		NEW HAMPSHIRE	2	7	13024	4.0	521	2	9	12645	449	2	12947	471
		CONNECTICUT	1	4	15815	3.6	561	1	14	15365	555	1	14889	538
		PENNSYLVANIA	1	5	10502	3.7	396	1	6	10410	381	3	10726	382
	774532	VERMONT	1	2	11650	3.8	443							
		MASSACHUSETTS	15	38	11254	3.7	419	10	12	10751	413	3	10826	422
	776442	VERMONT	1	1	7260	3.3	242							
		MASSACHUSETTS	18	54	11368	3.7	419	10	9	11450	451	2	11240	440
		NEW YORK	1	1	13130	3.5	464							
	780456	NEW HAMPSHIRE	5	10	13265	3.3	441	4	7	11874	469	2	11079	439
		VERMONT	62	132	10293	3.6	372	3	15	10180	435	2	10767	441
		MASSACHUSETTS	377	911	11519	3.7	420	327	16	11713	433	2	11789	439
		CONNECTICUT	2	7	13134	3.7	482	2	13	11606	447	4	11384	428
		NEW YORK	3	7	13770	3.7	514	1	18	15510	590	2	16258	646
		NEW JERSEY	76	205	11556	3.6	412	3	56	9838	374	1	10233	382
		VIRGINIA	1	2	11880	3.8	446							
	790106	NEW HAMPSHIRE	2	2	9195	3.8	350							
		VERMONT	46	106	10487	3.7	383	1	31	9210	325	1	10159	355
		MASSACHUSETTS	322	774	11102	3.7	409	242	14	11665	436	2	11764	441
		RHODE ISLAND	1	1	3860	3.7	142	1	8	11620	416	1	10900	379
		CONNECTICUT	4	13	12663	3.5	444	3	5	11591	423	3	13585	498
		NEW YORK	2	2	12660	4.1	521							
		PENNSYLVANIA	2	2	9120	4.0	343	1	6	7190	272			
	793079	MASSACHUSETTS	19	51	10826	3.6	388	9	12	10093	374	2	10095	381
		CONNECTICUT	1	3	13380	3.4	452	1	6	11127	398	3	11438	410
	799799	VERMONT	8	11	11149	4.0	446	8	12	11361	430	1	11088	415
		MASSACHUSETTS	10	17	11260	3.9	429	9	13	11147	436	2	10592	423
		NEW JERSEY	51	168	11481	3.6	412							
		PENNSYLVANIA	1	4	11818	3.3	389	1	3	12500	447			
		VIRGINIA	1	6	12683	3.5	446							
	799875	MAINE	5	6	10798	3.6	384	5	10	12393	461	1	13395	508
		NEW HAMPSHIRE	12	20	13896	3.5	492	9	7	13025	485	1	12371	472
		VERMONT	137	259	11648	3.6	416	45	12	11299	430	2	11029	427
		MASSACHUSETTS	784	1696	12249	3.6	438	726	17	11941	448	2	12066	454
		RHODE ISLAND	1	1	18820	3.7	692	1	6	15960	569	1	15816	576
		CONNECTICUT	8	21	13054	3.5	460	8	10	12556	464	3	11661	432
	815143	MAINE	4	7	11826	3.8	438	4	10	12294	454	2	12277	460
		NEW HAMPSHIRE	5	6	12028	3.9	462	4	12	12428	534	1	12317	515
		VERMONT	100	141	11296	3.9	442	53	18	11806	447	1	11818	449

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LBS.	TEST PCT.	FAT LBS.	305-DAY CONTEMPORARY AV.				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LBS.	FAT LBS.	RECORDS NO.	MILK LBS.	FAT LBS.
		MASSACHUSETTS	538	836	11594	3.9	456	525	19	12265	462	2	12544	475
		RHODE ISLAND	3	5	8810	3.6	324	3	38	11936	452	3	12212	428
		CONNECTICUT	15	25	13252	4.2	556	15	14	14392	551	1	13978	534
		NEW YORK	1	1	15170	3.4	511	1	4	11020	389	1	12568	488
		NEW JERSEY	8	14	12781	4.3	538	6	54	13533	551	1	12622	482
		PENNSYLVANIA	3	4	10297	4.4	452	3	20	12248	443	1	13013	487
828522		MAINE	2	4	12685	3.5	435	1	4	12580	451	1	11096	399
		NEW HAMPSHIRE	2	3	11168	3.8	417	1	10	12245	438	1	11565	405
		VERMONT	14	46	10416	3.7	381	5	14	10464	377	2	10081	365
		MASSACHUSETTS	41	107	12202	3.6	437	24	11	11848	448	2	11705	446
		CONNECTICUT	14	64	13329	3.5	468	13	11	12565	468	3	12568	471
		NEW YORK	1	4	13808	3.4	462							
828758		VERMONT	6	23	10548	4.0	419	1	1	10680	390	5	9420	343
		MASSACHUSETTS	26	82	11395	3.9	438	13	8	11729	449	3	12042	460
		CONNECTICUT	1	4	14568	3.6	525	1	9	13753	496	1	13047	473
857484		MASSACHUSETTS	7	16	11550	3.8	434	5	6	11075	417	2	10768	406
867643		VERMONT	24	47	10256	3.7	376	5	13	12778	460	1	12555	470
		MASSACHUSETTS	205	540	11529	3.7	419	178	21	11866	439	2	12066	450
		CONNECTICUT	1	2	9620	3.8	364	1	4	11935	441	1	12066	424
		MICHIGAN	1	1	9590	3.9	369	1	4	10790	361			
872445		MASSACHUSETTS	41	129	12766	3.8	479	38	9	12371	478	2	11967	459
		RHODE ISLAND	1	2	17150	3.3	561	1	8	11370	485	2	9009	463
		CONNECTICUT	1	5	16862	3.3	560	1	14	14174	543	5	14839	569
881984		NEW HAMPSHIRE	1	1	9900	3.3	324	1	7	11130	394	1	7303	258
		VERMONT	8	13	11959	3.6	424	3	11	12693	464	1	12590	467
		MASSACHUSETTS	32	79	11145	3.7	408	28	11	11061	418	2	10746	405
		RHODE ISLAND	1	1	8440	4.1	342	1	10	11100	417	1	10878	408
		NEW YORK	3	3	12310	3.6	442	1	52	13700	504	1	14017	513
897789		VERMONT	2	6	9713	3.6	342							
		MASSACHUSETTS	24	58	10895	3.8	414	21	18	11350	422	2	10985	413
918977		VERMONT	4	10	9228	3.6	328							
		MASSACHUSETTS	27	82	12038	3.6	433	25	9	12282	460	2	12005	456
920871		NEW HAMPSHIRE	6	8	11248	3.9	443	3	4	11194	423	1	10660	407
		VERMONT	46	100	10180	3.8	384	7	4	11492	418	2	10373	384
		MASSACHUSETTS	190	401	11304	3.8	432	186	16	11754	439	2	11802	442
		RHODE ISLAND	1	1	15130	3.7	555	1	8	16540	603	1	15816	576
		CONNECTICUT	4	7	13397	3.8	502	4	23	12934	475	2	12522	463
		NEW YORK	1	3	12973	4.0	510	1	20	13250	480	2	12742	480
		PENNSYLVANIA	1	2	8810	3.8	334	1	5	7615	282			
923314		MAINE	8	15	11474	3.8	436	6	7	11724	450	2	11466	452
		NEW HAMPSHIRE	38	51	12378	3.8	471	33	10	11948	479	1	11459	468
		VERMONT	293	488	11802	3.7	437	120	15	11195	425	1	11406	438
		MASSACHUSETTS	1550	2732	12423	3.8	465	1485	19	12174	457	2	12462	470
		RHODE ISLAND	4	7	15468	3.5	535	4	7	10235	414	2	10766	426
		CONNECTICUT	50	84	14625	3.8	556	48	21	14216	530	2	14253	540
		NEW YORK	6	10	13624	3.7	496	4	20	12290	474	1	13363	501
		NEW JERSEY	4	6	12554	4.0	504	3	20	12550	485	2	12828	484
		SOUTH DAKOTA	1	1	15440	4.3	661							
926101		NEW HAMPSHIRE	2	5	9973	3.5	341	1	7	12290	464	2	10813	421
		VERMONT	6	13	10852	3.4	361							
		MASSACHUSETTS	89	281	12040	3.6	428	61	10	11255	428	2	10974	418
		CONNECTICUT	1	3	10090	3.3	328	1	3	12890	456	2	11767	432
942029		MAINE	1	1	13420	3.9	519	1	5	12140	448	1	13374	510
		NEW HAMPSHIRE	2	5	13657	3.7	494	2	26	12788	500	2	12462	497
		VERMONT	26	34	10743	4.0	420	15	19	11441	424	1	11236	418
		MASSACHUSETTS	148	209	12245	4.0	483	142	21	12593	474	1	12994	491
		CONNECTICUT	5	7	11015	4.0	439	5	24	12346	494	1	12586	472
946847		NEW HAMPSHIRE	1	4	11368	4.1	464	1	3	12698	488	1	12600	481
		MASSACHUSETTS	3	13	10537	3.7	391	3	11	11814	432	3	11848	438
966218		MAINE	1	3	9167	4.6	421	1	4	10877	433	3	10191	462
		NEW HAMPSHIRE	2	5	11911	4.6	546	2	14	11155	479	2	10800	478
		VERMONT	25	30	10993	4.0	440	9	17	12422	488	1	11984	470
		MASSACHUSETTS	104	172	11688	4.0	464	101	22	12648	472	2	12778	479
		RHODE ISLAND	1	2	12785	3.6	462	1	8	12675	470	1	12851	481
		CONNECTICUT	2	2	12975	4.2	551	2	10	11260	419	1	13865	514
		MARYLAND	1	1	20220	4.8	968	1	2	5710	176			
978516		VERMONT	14	21	11963	4.0	473	9	21	13834	519	2	13410	512
		MASSACHUSETTS	81	101	11816	4.0	473	80	18	12282	458	1	12656	471

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	AV. RECORDS NO.	YEARLY MILK LB.	HERO FAT LB.	AV. FAT LB.
		987869	MAINE	2	5	13938	3.8	529	2	4	15072	524	2	13896	513	
			NEW HAMPSHIRE	6	6	13600	3.8	510	5	19	11804	483	1	11707	491	
			VERMONT	141	213	11505	3.8	430	70	15	11710	445	1	11945	456	
			MASSACHUSETTS	519	850	12076	3.8	454	507	20	12338	463	2	12544	473	
			RHODE ISLAND	2	6	13127	3.9	507	2	6	15590	576	3	13797	508	
			CONNECTICUT	10	14	10941	3.8	410	10	27	12467	482	1	12785	499	
		1001502	NEW HAMPSHIRE	2	2	12500	4.0	504	2	30	12945	489	1	13004	491	
			VERMONT	9	9	12240	3.7	451	6	16	10995	421	1	11532	440	
			MASSACHUSETTS	71	102	11876	3.7	441	68	20	11536	442	1	12387	465	
		1023347	NEW HAMPSHIRE	1	1	14960	3.1	462	1	8	14030	487	1	13276	467	
			VERMONT	32	37	11012	3.8	418	28	23	11144	423	1	11543	435	
			MASSACHUSETTS	263	328	12284	3.8	459	257	18	12226	466	1	12792	488	
			CONNECTICUT	1	1	13010	3.6	469	1	7	14590	542	1	15424	562	
			NEW YORK	1	1	10250	3.5	355								
		1029279	NEW HAMPSHIRE	1	1	9820	3.3	321	1	13	11340	459	1	11805	483	
			VERMONT	2	2	11685	4.1	482	2	30	11390	399	1	14039	499	
			MASSACHUSETTS	20	20	12790	3.7	467	19	29	12844	491	1	13510	504	
		1100193	VERMONT	5	8	13270	3.6	469	5	12	13107	485	1	13761	505	
			MASSACHUSETTS	74	90	12365	3.8	467	74	25	12764	490	1	13085	498	
			CONNECTICUT	3	3	12063	4.1	490	3	28	10913	439	1	12099	499	
			NEW YORK	2	3	12630	3.6	450	2	25	12840	461	2	13056	466	
			NEW JERSEY	6	7	11362	3.9	445	6	33	12264	487	1	12611	507	
		1250260	VERMONT	9	9	11928	3.7	443	9	16	10782	406	1	11060	413	
			MASSACHUSETTS	71	72	11833	3.8	446	64	20	12251	464	1	13079	496	
			CONNECTICUT	2	2	12885	3.5	446	2	29	12500	577	1	12971	492	
			MINNESOTA	1	1	7420	3.7	276								
		1255055	VERMONT	7	7	12983	3.6	470	7	17	12650	478	1	12655	479	
			MASSACHUSETTS	56	58	12743	3.8	484	56	22	12535	471	1	13627	518	
		1258022	VERMONT	1	1	9710	3.9	376	1	15	12660	480	1	14617	550	
			MASSACHUSETTS	21	21	13993	3.6	495	20	35	13430	501	1	14665	547	
			CONNECTICUT	1	1	12750	4.0	514	1	12	11620	441	1	12404	472	
		1280615	MASSACHUSETTS	1	1	15080	4.0	597	1	4	15010	563	1	15238	570	
JER.		385252	VERMONT	1	2	5415	5.5	297								
			MASSACHUSETTS	1	1	8430	4.8	407	1	1	6880	374	1	6693	343	
			NEW YORK	1	2	7215	6.6	476								
		419499	MAINE	5	21	7484	5.6	415	3	18	8581	454	4	8182	435	
			MASSACHUSETTS	1	1	4700	5.2	243								
		436872	VERMONT	2	2	8260	4.8	390								
			MASSACHUSETTS	11	20	7682	5.2	394	5	15	9065	477	1	8813	456	
			CONNECTICUT	1	2	8540	5.6	477	1	3	7135	386	2	7407	390	
		454144	VERMONT	3	4	8838	5.4	475								
			MASSACHUSETTS	60	146	7454	5.3	397	16	14	8072	425	3	8385	428	
			CONNECTICUT	6	13	7192	5.3	385	2	4	8378	422	3	8620	436	
			NEW YORK	1	1	6080	5.2	317					1	10355	452	
		457258	VERMONT	3	7	8706	4.9	427								
			MASSACHUSETTS	58	139	7879	5.2	401	15	8	8050	422	2	8598	423	
			CONNECTICUT	7	14	7296	5.4	397	4	10	8207	433	2	7543	389	
			NEW YORK	1	1	4680	5.6	262					1	10475	455	
		486323	VERMONT	30	41	7688	5.2	402	18	19	8144	425	2	8572	445	
			MASSACHUSETTS	29	33	7337	5.1	376	14	17	9158	463	1	9413	456	
		496829	VERMONT	18	22	6766	5.5	375	15	22	7766	407	1	8522	441	
			MASSACHUSETTS	35	50	7712	5.3	410	21	25	8603	454	1	9005	469	
			PENNSYLVANIA	1	1	5420	5.5	299								
		497516	NEW HAMPSHIRE	1	2	9310	4.9	453					1	11827	481	
			VERMONT	5	8	9348	5.3	493	5	51	8961	475	2	8500	447	
			MASSACHUSETTS	67	97	7867	5.1	399	30	14	8200	428	1	8948	443	
			CONNECTICUT	2	3	8538	5.0	422	2	11	7735	405	1	9134	470	
			NEW YORK	2	5	7644	4.9	372	1	25	5430	283	2	9554	503	
B. S.		45417	MAINE	3	7	8707	4.2	384								
			NEW HAMPSHIRE	5	8	8106	4.1	330	3	6	10507	421	2	10143	398	
			VERMONT	11	20	10186	4.1	414	3	10	10250	435	2	8968	368	
			MASSACHUSETTS	26	50	10058	4.2	415	5	9	11368	470	1	10559	433	
			CONNECTICUT	11	14	10925	4.1	456	5	12	10565	456	1	11416	490	
			NEW YORK	1	1	4440	3.9	173								
			MARYLAND	2	3	7175	4.3	299								
			NORTH CAROLINA	1	1	11640	4.2	490	1	37	7920	357	1	8055	365	

TABLE 16.—DAUGHTER—AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS—GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
	65421	MAINE	1	1	11370	4.0	451							
		NEW HAMPSHIRE	3	9	9553	4.1	389							
		VERMONT	7	17	11143	4.0	449	1	4	7310	290	3	9193	369
		MASSACHUSETTS	37	84	11276	4.0	448	1	35	11340	486	1	11096	471
		CONNECTICUT	13	38	11768	4.0	475	25	19	10091	418	2	9262	384
		NEW YORK	5	14	11020	3.9	429	6	14	11663	498	3	11641	505
		NEW JERSEY	6	9	10032	4.1	411							
		ILLINOIS	1	1	8180	4.6	377	1	1	10940	465			
		MARYLAND	1	1	14940	3.9	579	1	25	10980	441	1	9810	355
		OKLAHOMA	2	3	9093	4.1	368							
	70747	MAINE	8	14	9793	4.2	409							
		NEW HAMPSHIRE	5	10	8654	3.9	340	4	8	8873	361	2	9164	370
		VERMONT	16	32	10385	4.0	416	3	12	10123	421	1	9425	382
		MASSACHUSETTS	62	119	11116	4.1	460	22	23	9951	420	2	10337	421
		CONNECTICUT	39	61	11625	4.2	484	19	13	11912	504	1	11855	498
		NEW YORK	9	14	10753	4.1	440	2	13	10795	446	2	10546	425
		MARYLAND	5	9	10522	4.3	444	3	14	9733	371	1	10248	393
		VIRGINIA	2	2	10615	4.5	481	2	44	11180	486	1	11412	488
		GEORGIA	1	1	5450	5.8	318	1	27	12050	493			
	72115	MASSACHUSETTS	7	13	10633	4.0	419	7	20	12540	553	2	12427	532
	74937	MASSACHUSETTS	3	7	9577	4.4	428							
		CONNECTICUT	2	2	10110	4.1	413							
	78688	VERMONT	1	1	11610	4.3	497							
		MASSACHUSETTS	11	38	12285	4.3	526	3	7	10783	439	3	10328	423
	84255	MASSACHUSETTS	1	2	10020	4.4	442							
	89612	NEW HAMPSHIRE	5	14	10537	4.1	435	3	7	9598	373	2	9910	388
		VERMONT	8	11	10266	4.3	440	4	11	9368	398	1	9752	410
		MASSACHUSETTS	43	75	9981	4.3	430	20	14	10333	420	1	10134	432
		CONNECTICUT	21	40	9756	4.3	420	13	12	10962	466	2	10585	448
		NEW YORK	3	8	12223	4.3	520							
		NEW JERSEY	1	2	13485	4.2	560							
		WISCONSIN	1	2	9425	4.2	393	1	8	10360	418	1	10093	402
		IOWA	1	6	8580	4.5	386	1	9	8967	362	4	8273	331
		MISSOURI	2	4	8648	4.4	375	1	9	10050	420	1	9429	384
		KANSAS	1	4	8760	4.7	409	1	2	8915	415	2	10137	462
		MARYLAND	2	3	8425	4.1	344	2	10	10400	414	2	10693	429
		NORTH CAROLINA	1	1	7600	4.1	314	1	37	8030	362	1	7990	362
		OKLAHOMA	1	2	13965	4.4	603	1	11	12535	513	2	11380	493
	89614	VERMONT	4	11	10297	4.2	432	1	9	10580	441	3	10021	409
		MASSACHUSETTS	45	70	10492	4.4	460	33	26	10023	424	2	10155	425
		CONNECTICUT	13	22	11289	4.3	484	7	10	12945	559	1	12234	531
		NEW JERSEY	2	2	13120	4.7	618							
		OHIO	1	1	8300	5.5	454							
		MINNESOTA	1	1	9920	3.5	349	1	1	6290	231	1	8317	320
		MARYLAND	5	6	10478	4.4	441	3	23	10440	421	1	10112	377
	90000	NEW HAMPSHIRE	1	1	5880	3.7	218							
		VERMONT	1	1	10360	4.2	435							
		MASSACHUSETTS	6	26	10213	4.3	428	3	24	9661	406	4	9487	398
		NEW JERSEY	1	2	7890	4.0	319							
		OHIO	1	1	10330	3.6	377	1	16	10320	421	1	10333	407
		MARYLAND	1	4	6540	4.4	294							
	108905	MAINE	1	1	13410	4.3	578							
		NEW HAMPSHIRE	2	2	11570	3.9	456	2	3	9830	389	1	10126	382
		VERMONT	7	10	9015	4.0	364	2	14	8973	380	2	8987	369
		MASSACHUSETTS	9	14	14576	4.1	600	2	24	9415	383	2	10653	438
		CONNECTICUT	7	10	10915	4.1	443	5	17	10308	438	1	9651	394
		NEW YORK	3	6	10653	4.1	441	2	27	12993	549	3	13767	571
		NEW JERSEY	1	1	12460	4.0	493	1	28	11830	486	1	12797	524
		VIRGINIA	1	1	12320	3.9	481	1	23	12030	499	1	11467	491
002 AYR.	87357	MINNESOTA	1	1	11180	4.2	468							
		IOWA	11	19	8420	4.1	342	11	8	9862	386	2	8967	357
		CALIFORNIA	1	2	11750	4.1	475							
GUER	255085	MASSACHUSETTS	2	5	8099	4.8	381							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY RECORDS NO.	AV. MILK LB.	AV. FAT LB.	YEARLY HERD RECORDS NO.	AV. MILK LB.	AV. FAT LB.
001	AYR.	72408	RHODE ISLAND	10	24	10549	4.2	437	3	8	11653	480	3	11735	478
		79588	RHODE ISLAND CONNECTICUT	3 1	12 3	9160 9683	4.3 4.1	396 396	1	9	11815	463	4	11391	455
		92251	NEW HAMPSHIRE RHODE ISLAND	1 11	1 21	8840 9640	3.9 4.0	346 383	2	19	10815	443	1	10590	434
		110634	RHODE ISLAND	5	6	9813	4.1	405	4	17	10948	439	1	11034	446
	GUER	336058	NEW HAMPSHIRE RHODE ISLAND	1 8	1 14	5790 7167	4.5 4.6	258 326	6	6	8821	394	2	8572	398
		377945	RHODE ISLAND CONNECTICUT	8 1	20 4	8769 7000	4.9 4.7	432 330	2 1	4 17	10524 7950	499 374	3 2	10288 7952	474 380
		401232	RHODE ISLAND	2	2	10005	4.5	450	2	14	10390	468	1	10519	451
		403768	RHODE ISLAND CONNECTICUT	13 1	27 1	7763 7860	5.0 4.6	385 455	11 1	9 14	8934 9890	413 481	2	8692	408
		433179	RHODE ISLAND	7	18	9115	4.9	451	6	6	9752	445	2	9205	428
		438526	RHODE ISLAND CONNECTICUT	9 1	16 2	8986 5935	4.9 4.8	439 282	6 1	7 21	9637 8560	437 403	1 2	9344 7565	426 361
		440580	RHODE ISLAND CONNECTICUT	2 1	6 1	8675 6250	5.0 5.4	432 338	2 1	6 15	10582 7720	448 384	2 1	10075 8328	446 393
	HOL.	806256	MASSACHUSETTS RHODE ISLAND NEW YORK NEW JERSEY MARYLAND	1 1 1 66 1	1 1 1 179 1	10340 11560 10590 11458 8260	4.8 4.0 4.0 4.0 4.1	494 463 421 455 335	1 1 1 14 1	11 11 27 5	11680 12453 9310	445 459 351	1 1 1 1 1	11249 12474 8960	383 469 337
		917922	RHODE ISLAND	1	3	12913	4.1	525	1	8	11047	430	3	10322	396
		924987	RHODE ISLAND	1	2	12730	3.6	452							
		960441	MASSACHUSETTS RHODE ISLAND	2 34	2 76	11415 12502	4.2 3.9	475 480	1 30	20 11	12390 12397	446 472	1 1	12219 12072	437 465
		961175	RHODE ISLAND	17	31	11711	3.7	435	15	24	12049	455	2	11746	440
		1006614	RHODE ISLAND	1	1	11270	3.9	438	1	113	10010	377	1	9647	363
		1019845	DELAWARE MARYLAND	3 1	3 1	10040 14390	3.8 3.6	383 524	3 1	15 13	10530 12910	400 469	1 1	10962 10104	440 344
		1028928	NEW HAMPSHIRE RHODE ISLAND	1 8	1 11	17310 12368	4.2 3.9	726 477	1 8	18 11	14580 13247	575 506	1 1	9221 12894	360 482
		1036233	RHODE ISLAND	6	7	9280	3.9	366	6	55	10948	415	1	10575	396
		1036234	RHODE ISLAND	4	5	10330	3.9	392	3	14	11430	430	2	10824	406
		1040368	NEW HAMPSHIRE RHODE ISLAND	3 9	3 10	13213 13457	3.9 3.8	515 510	3 9	18 8	13363 12697	528 457	1 1	9668 13087	375 490
		1042501	RHODE ISLAND NEW YORK	1 16	2 23	11995 14289	3.9 3.5	461 500	1 13	18 30	13535 14203	501 513	2 1	12268 14083	455 508
		1071095	RHODE ISLAND	9	16	11186	3.8	423	9	89	10489	397	1	9988	380
		1094213	MASSACHUSETTS RHODE ISLAND	3 30	3 39	13200 13142	3.9 3.7	516 489	3 28	8 9	9967 12934	386 487	1 1	10715 12945	415 489
		1098371	RHODE ISLAND	9	11	11374	3.9	432	9	14	11511	447	1	11268	445
		1100759	RHODE ISLAND	10	11	12528	3.7	460	10	9	13358	498	1	13725	523
		1141864	RHODE ISLAND	19	28	13452	3.8	506	17	57	11782	446	1	11575	451
	JER.	461935	RHODE ISLAND CONNECTICUT	1 1	4 2	6565 10485	4.9 5.6	321 588		11	8100	447	1	8578	463
		509910	RHODE ISLAND	8	16	8144	5.7	457					1	8938	486

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	YEARLY HERD NO.	MILK LB.	FAT LB.
000	AYR.	46463	NEW HAMPSHIRE	3	6	9017	4.3	391						
			VERMONT	3	5	6614	4.4	293						
			MASSACHUSETTS	1	2	11490	4.4	504						
			CONNECTICUT	12	34	9521	4.2	400	1	7	10233	404	1	9254 374
			PENNSYLVANIA	2	7	8905	4.1	360						
			OHIO	2	3	9723	4.3	401						
		54561	RHODE ISLAND	2	9	11773	3.9	466						
			CONNECTICUT	12	33	10597	3.9	408						
		57299	MASSACHUSETTS	1	2	9365	4.1	383						
			CONNECTICUT	14	34	8400	4.0	334						
			OHIO	1	1	9890	3.8	380						
			MARYLAND	1	1	8710	3.8	334						
	GUER	148228	WISCONSIN	1	1	8520	4.9	421						
		177128	CONNECTICUT	2	5	6183	4.9	295						
		192368	CONNECTICUT	6	14	7063	4.8	341						
		208969	CONNECTICUT	2	2	8605	4.4	369						
		231202	CONNECTICUT	30	69	7926	4.7	367	5	6	8603	404	1	9186 416
			PENNSYLVANIA	2	3	5323	4.5	238						
			NEW MEXICO	1	3	8137	4.2	339						
		232391	CONNECTICUT	7	19	8337	4.6	383	1	4	8736	402	1	8709 401
		262046	MAINE	3	14	9869	4.6	455	1	3	7920	349	2	8802 389
			CONNECTICUT	16	48	9811	4.5	438						
	HOL.	710681	CONNECTICUT	4	10	11816	3.8	443						
			NEW YORK	1	1	15290	3.4	526						
		714015	CONNECTICUT	10	30	9451	3.6	335	1	7	10978	388	1	10856 386
		718649	CONNECTICUT	1	3	12360	3.4	417						
			NEW YORK	1	1	4250	3.6	152						
		733982	CONNECTICUT	2	3	12608	3.4	432						
		753876	CONNECTICUT	9	24	10523	3.3	349						
		796113	MASSACHUSETTS	1	1	9650	4.1	392						
			CONNECTICUT	19	66	10767	3.7	394	2	14	11853	444	2	11991 444
		799841	MASSACHUSETTS	2	3	11008	3.5	382						
			CONNECTICUT	17	58	10761	3.5	373	2	6	10430	379	2	8126 285
	JER.	811292	CONNECTICUT	1	1	10310	3.5	363						
			NEW YORK	1	6	13318	3.2	426						
		342438	CONNECTICUT	8	16	8255	5.0	410						
		350411	RHODE ISLAND	1	5	6718	5.3	362						
		361372	RHODE ISLAND	1	4	10780	5.3	567						
			CONNECTICUT	3	6	8135	5.1	409						
		366015	CONNECTICUT	3	11	8664	5.0	435						
		377517	NEW HAMPSHIRE	1	2	6100	5.5	335	1	2	9060	405	1	7140 380
			CONNECTICUT	2	3	5818	5.1	287						
001	AYR.	46522	VERMONT	6	18	9981	4.2	413						
			CONNECTICUT	23	88	9009	4.2	375	4	6	9354	379	2	9562 391
			NEW YORK	2	7	8148	3.9	316						
			NEW JERSEY	1	1	9130	4.0	366						
			MARYLAND	2	10	9534	4.0	377						
		61986	CONNECTICUT	8	32	9927	4.2	411	4	9	9430	388	2	9193 373
			NEW YORK	1	7	12920	4.1	526						
		65761	VERMONT	2	7	6596	3.7	245						
			CONNECTICUT	6	17	10250	4.0	410	1	19	10020	408	1	10758 436
	GUER	247017	CONNECTICUT	37	89	7312	4.9	360	11	6	8931	417	2	9316 430
			NEW YORK	2	10	6957	4.9	335	1	7	6835	348	1	8066 383
		260090	NEW HAMPSHIRE	1	5	6676	5.2	343						
			MASSACHUSETTS	1	1	6140	4.7	287						

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAS.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	YEARLY RECORDS NO.	MILK LB.	AV. FAT LB.
		CONNECTICUT	45	123	7784	4.6	360	9	6	8209	385	3	8309	395
		NEW YORK	1	1	7370	5.8	424							
	273511	CONNECTICUT	4	9	7782	4.8	371	1	4	9475	415	2	9069	404
	294228	CONNECTICUT	5	11	8258	4.7	384	1	5	8960	401	2	9838	434
	308118	MASSACHUSETTS	6	7	7239	4.8	346	2	8	8745	419			
		CONNECTICUT	6	20	8192	4.8	389	1	9	8923	414	3	7641	404
		NEW MEXICO	1	4	9880	5.2	513							
	309779	CONNECTICUT	22	69	8826	4.7	418	17	11	9646	452	3	9533	443
		NEW YORK	1	1	9590	4.2	402	1	2	8880	354			
	316996	NEW HAMPSHIRE	1	5	8844	5.3	464							
		VERMONT	1	3	7260	4.8	349							
		RHODE ISLAND	1	2	9165	5.0	453	1	5	9580	427	1	8905	397
		CONNECTICUT	88	186	8502	4.7	397	79	11	9787	437	2	9355	420
	318425	MASSACHUSETTS	2	10	9333	4.5	417	2	7	9811	462	1	9412	442
		CONNECTICUT	134	310	8072	4.7	374	74	10	8866	397	2	8846	399
		NEW YORK	4	4	7318	5.0	366	2	10	9065	415			
	319638	CONNECTICUT	2	9	7447	4.4	327	1	7	8030	374	4	7720	365
	324361	CONNECTICUT	1	2	8790	4.1	360	1	10	7965	369			
	337294	CONNECTICUT	28	90	8576	4.8	407	18	8	9311	427	3	9154	425
		NEW YORK	1	1	8510	4.7	397							
	340093	CONNECTICUT	12	28	8570	4.3	372	5	7	9653	387	2	9085	376
	342719	MASSACHUSETTS	1	3	6757	4.9	333	1	3	7900	349	3	7630	359
		CONNECTICUT	113	210	7929	4.7	373	104	11	9373	422	2	9323	418
		NEW YORK	1	1	7160	4.9	353	1	4	5480	238			
		FLORIDA	1	1	6690	3.5	230							
	344204	CONNECTICUT	23	53	8078	4.4	355	18	11	9213	410	2	9002	408
	359822	CONNECTICUT	22	86	9300	4.7	437	11	10	9566	459	3	9473	459
	365783	MASSACHUSETTS	3	10	8762	4.4	390	3	26	8079	372	2	8611	400
		RHODE ISLAND	3	5	6818	5.1	349							
		CONNECTICUT	137	272	8183	4.9	403	117	11	9514	430	2	9400	424
		NEW YORK	3	7	8989	4.8	435	3	13	8763	417	2	8460	398
		FLORIDA	2	4	8058	4.8	385							
	368597	MASSACHUSETTS	1	1	8100	5.5	448							
		CONNECTICUT	10	23	8394	4.8	406	1	1	9328	535	3	10871	599
	373823	NEW HAMPSHIRE	1	1	11660	4.4	507							
		MASSACHUSETTS	2	7	7646	4.7	355	2	11	8343	385	3	8527	392
		CONNECTICUT	43	79	8364	4.5	378	38	12	9563	425	2	9332	416
	374383	CONNECTICUT	28	67	8507	4.6	390	11	7	9058	409	2	8922	420
		NEW YORK	1	6	11265	4.4	500							
	383793	CONNECTICUT	154	276	8513	5.0	421	148	11	9620	430	2	9497	424
	397654	CONNECTICUT	1	1	7570	4.5	339	1	10	11550	485	1	10420	436
	401818	CONNECTICUT	6	18	8925	5.0	445	6	11	10257	449	3	9493	428
	402236	CONNECTICUT	56	138	7619	4.7	360	37	9	8628	395	2	8564	399
		NEW YORK	2	2	6995	4.8	333	1	9	10080	478			
		NEW JERSEY	1	3	8530	4.8	411							
	404434	NEW HAMPSHIRE	1	1	8130	4.5	367	1	91	9480	395	1	8349	351
		VERMONT	8	24	7572	4.8	361							
		MASSACHUSETTS	1	2	7615	4.9	373	1	3	7180	323	2	7837	361
		CONNECTICUT	70	138	7980	4.7	374	58	10	9303	411	2	9040	403
		NEW YORK	2	2	9725	5.1	492							
		SOUTH CAROLINA	1	1	6610	5.0	332	1	7	7000	341			
	413425	CONNECTICUT	3	6	10498	4.9	518	3	15	10108	453	2	10052	448
	417939	NEW HAMPSHIRE	11	21	7504	4.6	342	5	32	8688	370	2	8320	373
		VERMONT	12	32	7957	4.6	365	1	19	9555	465	2	9860	498
		MASSACHUSETTS	1	5	6564	5.2	340	1	12	8072	371	1	7586	348
		CONNECTICUT	50	109	8266	4.5	371	48	11	9131	407	2	9154	407
		FLORIDA	1	1	4400	4.2	186							
	444155	CONNECTICUT	18	20	7261	4.8	348	16	11	11218	449	1	10945	443

TABLE 16.—DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS—GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY RECORDS NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
HOL.	445804	CONNECTICUT	8	8	9001	4.6	417	7	9	10580	465	1	11168	466
		NEW YORK	2	2	10270	4.3	442	2	107	9930	459			
	456054	CONNECTICUT	20	39	8950	4.7	424	19	13	9486	436	2	9256	413
	518604	CONNECTICUT	2	2	8890	4.4	392	2	8	12570	519	1	11848	464
	633761	CONNECTICUT	19	50	10670	3.6	383							
		NEW YORK	3	9	8589	3.4	294							
	715532	CONNECTICUT	64	235	11162	3.7	407	10	10	12298	456	2	12162	449
		NEW YORK	10	28	9279	3.7	336							
		WISCONSIN	1	1	14700	3.2	463							
	715961	CONNECTICUT	8	18	8847	3.4	301							
	755834	CONNECTICUT	37	124	10688	3.6	386	13	8	10925	418	2	10234	386
		NEW YORK	2	8	9913	3.5	347							
		MARYLAND	1	1	13860	3.9	542							
	756552	CONNECTICUT	60	168	10843	3.6	387	15	14	11284	416	3	10857	401
		NEW YORK	3	8	9962	3.3	335							
	759193	VERMONT	1	2	14360	3.5	500	1	14	12970	441	1	13429	468
		MASSACHUSETTS	1	4	14175	3.7	519	1	8	15673	606	4	15356	601
		CONNECTICUT	64	200	12853	3.5	445	23	12	12064	438	2	11650	430
		NEW YORK	4	8	10620	3.6	379							
	762945	MASSACHUSETTS	1	3	10933	3.5	376							
		CONNECTICUT	33	96	12045	3.5	422	11	6	11323	416	2	10501	380
		NEW YORK	1	1	14250	3.4	478							
	777495	MASSACHUSETTS	1	7	13507	3.4	461	1	2	11515	406	1	11728	456
		CONNECTICUT	45	159	12026	3.6	435	11	8	12107	445	2	11415	418
		NEW YORK	4	10	10177	3.6	370							
	803878	MASSACHUSETTS	1	5	10400	3.6	373	1	4	12023	429			
		CONNECTICUT	43	142	11860	3.7	431	25	14	12408	456	2	11890	438
	817044	MAINE	1	1	14660	3.8	563							
		VERMONT	1	1	13090	3.6	470							
		CONNECTICUT	98	295	11210	3.7	414	44	11	11963	439	2	11583	429
		NEW YORK	4	17	12851	3.5	451							
	822065	VERMONT	1	1	11340	4.3	483							
		MASSACHUSETTS	1	3	15003	3.6	548	1	106	11533	446	1	11249	451
		CONNECTICUT	135	343	11086	3.9	431	109	13	12099	448	2	11912	443
		NEW YORK	1	1	16460	3.8	623	1	45	12920	490	1	13254	507
		NEW JERSEY	40	168	10700	3.9	413	4	12	12746	482	2	11472	438
		PENNSYLVANIA	1	2	7650	3.6	276	1	15	11680	429	2	12562	460
		MARYLAND	1	1	13580	4.0	538							
		VIRGINIA	1	2	7960	3.8	299							
	860603	VERMONT	2	5	12645	3.6	454							
		MASSACHUSETTS	5	13	11595	3.6	422	4	21	11112	420	2	11744	435
		RHODE ISLAND	1	1	10760	3.8	410	1	13	11600	440	1	10878	408
		CONNECTICUT	237	601	11269	3.7	410	171	13	12080	445	2	11702	434
		NEW YORK	1	6	16477	3.8	618							
	875201	NEW HAMPSHIRE	2	8	12488	3.8	468	2	8	10973	394	2	10497	371
		VERMONT	2	9	12825	3.8	479							
		CONNECTICUT	285	625	12104	3.8	457	267	15	12285	456	2	11998	444
	879982	CONNECTICUT	37	87	10880	3.7	399	17	11	11079	413	2	10440	388
	893638	MAINE	1	2	13605	3.4	463							
		NEW HAMPSHIRE	1	1	9650	4.1	393							
		VERMONT	2	8	11237	3.7	408							
		MASSACHUSETTS	2	2	13450	3.8	504	2	11	10305	395	1	11009	405
		RHODE ISLAND	1	2	17340	3.6	621	1	2	9450	297	1	14748	557
		CONNECTICUT	597	1363	12094	3.7	445	481	14	12399	462	2	12227	454
		NEW YORK	1	7	10961	3.5	385							
		VIRGINIA	1	3	12197	4.0	485	1	6	15690	625			
	898470	MAINE	1	3	9503	3.5	334							
		MASSACHUSETTS	1	4	9593	3.9	373							
		CONNECTICUT	25	72	11276	3.6	407	8	8	12580	471	2	11754	433
		NEW YORK	2	2	11585	3.8	446							
	902030	CONNECTICUT	5	12	12143	3.6	445	2	12	10948	390	2	11373	417
	902500	NEW HAMPSHIRE	3	5	13663	3.6	496	3	6	11031	433	2	9816	363
		VERMONT	1	3	13477	3.6	478							
		MASSACHUSETTS	2	2	13885	3.4	472	1	23	13350	515	1	14116	546
		CONNECTICUT	291	501	12053	3.7	439	280	15	12636	470	2	12459	464

TABLE 16.—DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS—GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LBS.	TEST PCT.	FAT LBS.	305-DAY DAUS.	CONTEMPORARY NO. RECORDS	AV. MILK LBS.	FAT LBS.	YEARLY HERD NO.	RECORDS MILK LBS.	AV. FAT LBS.
			NEW YORK	2	2	11880	3.7	437	2	22	14185	523	1	10617	406
			VIRGINIA	2	4	11107	4.1	446							
		914858	NEW HAMPSHIRE	1	2	11495	4.0	460	1	2	12630	497	1	14268	538
			VERMONT	1	1	14610	3.6	525							
			CONNECTICUT	240	387	12829	3.7	468	230	16	13002	487	2	12666	473
			VIRGINIA	1	1	10310	3.4	350	1	32	11990	442	1	12045	455
		921170	VERMONT	1	4	12253	3.6	438							
			MASSACHUSETTS	1	1	8270	3.7	307	1	6	12720	464	1	13865	506
			CONNECTICUT	173	429	11909	3.6	422	143	13	11984	443	2	11642	433
			VIRGINIA	1	1	15020	3.1	464							
		988462	NEW HAMPSHIRE	1	1	13250	4.0	533	1	1	9650	393			
			VERMONT	2	4	13684	3.5	479							
			MASSACHUSETTS	1	1	10190	3.9	396	1	15	9410	394	1	11325	458
			RHODE ISLAND	1	2	20315	3.7	755	1	2	12455	445	1	15903	583
			CONNECTICUT	233	362	12996	3.7	485	223	17	12778	480	2	12648	475
		990221	NEW HAMPSHIRE	1	2	15235	3.7	567	1	26	10830	495	2	10470	440
			VERMONT	2	6	15058	3.2	473							
			MASSACHUSETTS	4	6	13199	3.7	491	2	8	11773	443	2	12094	450
			CONNECTICUT	234	592	11983	3.5	413	160	12	11917	443	2	11537	430
		996252	NEW HAMPSHIRE	3	5	15543	3.9	602	3	6	13830	537	1	11745	449
			VERMONT	2	3	13848	3.8	525							
			MASSACHUSETTS	2	3	14738	3.7	536	1	19	11250	408	2	11364	416
			CONNECTICUT	371	486	12854	3.8	486	353	16	13296	497	1	13085	489
			NEW YORK	4	5	12043	4.0	481	2	6	9580	424	1	10225	434
			VIRGINIA	1	1	17950	3.8	681	1	13	12680	463	1	12404	465
		1030458	VERMONT	1	3	11780	3.7	431							
			CONNECTICUT	56	123	11708	3.8	447	54	16	12068	456	2	11954	448
		1030640	VERMONT	1	1	13240	4.3	565							
			MASSACHUSETTS	3	4	13897	3.5	482	3	17	12725	482	1	13625	527
			RHODE ISLAND	1	2	15990	3.7	587	1	6	13335	517	2	14236	536
			CONNECTICUT	108	146	12310	3.6	443	105	17	12502	466	1	12567	469
			NEW YORK	1	1	11650	3.6	416							
		1031501	VERMONT	1	1	12330	3.8	473							
			MASSACHUSETTS	4	7	12269	4.0	484	4	14	12761	478	2	13235	492
			RHODE ISLAND	1	2	17790	3.6	643	1	1	14675	545	2	12426	508
			CONNECTICUT	393	615	12125	3.8	456	369	17	12578	474	2	12494	470
			VIRGINIA	2	2	9585	3.8	361	2	31	12090	444	1	12165	456
		1067863	CONNECTICUT	195	286	11366	3.7	417	186	16	12399	467	1	12270	461
			NEW YORK	1	1	9810	3.4	338	1	4	9930	495	1	9091	408
		1076273	MASSACHUSETTS	1	2	13605	3.4	460	1	10	10770	403	1	13581	484
			CONNECTICUT	48	79	12897	3.6	462	46	17	12777	479	2	12708	478
		1156726	CONNECTICUT	2	2	5900	3.9	216	2	1	8360	286	1	15675	581
		1184353	CONNECTICUT	69	94	12101	3.8	461	66	21	12847	476	1	12717	473
		1193686	CONNECTICUT	133	159	12146	3.8	462	120	16	12908	483	1	12773	478
			VIRGINIA	1	2	14710	4.0	591	1	6	14495	545	1	12818	482
JER.		455014	CONNECTICUT	5	8	8361	5.1	428							
		465924	CONNECTICUT	5	9	8318	5.9	492							
		465970	CONNECTICUT	2	7	9172	5.5	497	1	19	8885	469	4	8260	429
		476925	CONNECTICUT	32	42	8045	5.4	439	9	11	9663	512	1	10142	505
		487048	CONNECTICUT	14	21	8210	5.7	466	7	19	10613	575	2	9884	488
		488581	CONNECTICUT	15	20	8723	5.0	431	8	16	9881	498	1	9817	480
002	GUER	197360	NEW HAMPSHIRE	1	1	5520	5.2	290							
			CONNECTICUT	28	54	7854	5.0	390							
			NEW YORK	1	2	8075	4.8	381							
		205109	CONNECTICUT	1	7	8869	4.7	413							
		227402	CONNECTICUT	1	4	8708	5.0	432							
		229732	CONNECTICUT	11	37	9782	4.4	432	2	2	8379	400	3	8516	415
			NEW YORK	2	8	7988	4.5	355							
		248788	CONNECTICUT	3	9	7846	4.8	381	2	5	7728	380	2	6786	326

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	AV. RECORDS NO.	YEARLY MILK LB.	HERD FAT LB.	AV. LB.
		269662	CONNECTICUT	10	23	7913	4.6	359	1	15	8977	433	3	9182	431	
		277566	CONNECTICUT PENNSYLVANIA	3 1	13 1	8073 8670	5.5 5.0	443 432								
		287252	CONNECTICUT	2	4	6494	4.4	279								
		293366	CONNECTICUT	5	17	9807	4.5	434	4	7	8625	405	2	9118	423	
	HOL.	698490	CONNECTICUT NEW YORK	14 5	29 11	9532 8602	3.7 3.5	353 297	2	11	12604	462	1	12633	435	
		722276	CONNECTICUT	6	25	12098	3.5	419								
		787322	CONNECTICUT NEW YORK	9 1	39 4	10278 11798	3.8 3.5	394 414	1	16	12404	470	1	11467	423	
		855699	MASSACHUSETTS CONNECTICUT	1 19	1 75	9300 12449	3.2 3.4	294 426	6	8	11958	440	3	12433	461	
		876262	CONNECTICUT NEW YORK NEW JERSEY	14 1 1	66 6 4	12275 10383 13000	3.7 3.7 3.6	455 385 470	6	11	13016	479	3	12445	462	
		876927	CONNECTICUT	8	38	11247	3.5	398	4	8	10733	396	3	10225	387	
003	AYR.	48082	NEW HAMPSHIRE VERMONT CONNECTICUT NEW YORK	1 1 14 1	1 5 53 4	7370 6494 9562 10263	4.1 4.3 4.0 3.9	301 280 386 400	2	9	9946	393	2	9832	398	
		53909	VERMONT CONNECTICUT NEW YORK NORTH CAROLINA	2 7 25 1	2 25 60 7	7335 9233 8616 6671	3.7 4.0 3.9 3.5	271 366 337 234	1	2	6307	260	2	5728	224	
		61316	MAINE	1	4	8218	4.6	381	1	5	8093	346	1	6943	292	
		65366	MASSACHUSETTS CONNECTICUT NEW YORK KANSAS	1 1 18 1	1 5 73 1	7610 8164 10991 8350	4.0 4.0 4.3 3.8	305 323 477 319								
		70975	VERMONT MASSACHUSETTS CONNECTICUT NEW YORK	1 3 8 6	1 6 33 23	6670 9768 10655 9243	4.9 4.2 4.2 4.3	330 408 437 397	4	11	9664	398	2	9245	378	
	GUER	224975	MASSACHUSETTS CONNECTICUT	1 10	1 27	10290 11576	3.9 4.3	400 493	4	7	10863	439	2	11050	456	
		228306	MASSACHUSETTS CONNECTICUT	2 27	6 98	11033 8232	4.3 4.5	467 370	2 4	14 13	8668 9234	410 428	2 3	9363 8330	431 414	
		230189	CONNECTICUT	1	2	8085	5.0	406								
		278098	CONNECTICUT	3	5	6866	4.8	328								
		290069	MASSACHUSETTS CONNECTICUT	1 8	2 45	9475 9900	5.1 4.7	480 464	2	10	10176	460	3	9742	418	
		304464	CONNECTICUT	6	13	7109	5.5	386								
		317908	CONNECTICUT	2	3	7510	5.1	378								
		352492	CONNECTICUT	2	8	10516	4.4	453	2	7	9731	431	3	9874	447	
	HOL.	673409	MASSACHUSETTS CONNECTICUT	1 14	3 42	10650 11663	3.6 3.5	381 409	1	9	10810	395	2	10541	384	
		683509	VERMONT CONNECTICUT	1 11	4 25	10708 9506	4.0 3.6	428 337								
		684989	CONNECTICUT	7	30	10172	3.6	365	1	12	9847	372	2	9533	348	
		684991	MASSACHUSETTS CONNECTICUT NEW YORK NEW JERSEY	2 12 32 1	2 37 112 5	11655 12039 12756 12440	3.6 3.6 3.6 3.8	412 436 453 466	2	9	10769	400	1	10061	384	
		700841	CONNECTICUT NEW JERSEY	7 1	14 1	10262 14930	3.5 3.3	361 496	1	2	7373	334	1	9690	363	
		704282	MASSACHUSETTS CONNECTICUT	1 32	5 107	9108 12064	4.0 3.6	360 431	1 12	2 11	9014 12123	326 446	1 2	10976 11790	419 435	

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				AV. YEARLY HERD		
									NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
		785226	CONNECTICUT	7	11	10354	3.4	355	2	2	9485	350			
		795193	CONNECTICUT	3	7	11675	3.5	406							
		806222	MAINE	1	2	13430	3.5	475							
			CONNECTICUT	19	53	10733	3.7	397	5	13	12271	446	2	11673	430
			NEW YORK	1	1	7680	4.0	307							
004	AYR.	91833	MASSACHUSETTS	1	1	9060	4.4	395	1	13	14280	500			
		95384	MAINE	16	17	8854	4.3	380	14	11	9553	397	1	9832	408
			NEW HAMPSHIRE	23	29	9440	4.3	404	22	15	9548	399	1	9980	412
			VERMONT	37	47	9625	4.3	414	36	25	10459	426	1	10414	427
			MASSACHUSETTS	63	75	9623	4.4	422	56	19	10308	418	1	10549	435
			RHODE ISLAND	5	6	9591	4.3	411	4	21	10526	433	1	10717	435
			CONNECTICUT	24	29	8229	4.3	355	23	22	10021	408	1	10566	430
			NEW YORK	47	58	9444	4.4	410	45	15	10413	422	1	10878	438
			PENNSYLVANIA	4	5	6445	4.0	262	4	6	8211	330	1	9579	394
			IOWA	3	5	11292	4.5	514	3	16	10290	435	2	9044	451
			VIRGINIA	5	5	8176	4.4	356	4	14	9825	430			
		99089	NEW HAMPSHIRE	1	1	9380	4.3	404	1	22	10110	401	1	11750	472
			RHODE ISLAND	12	13	10669	4.1	438	11	17	10575	428	1	10619	425
			NEW YORK	1	1	9200	4.0	366	1	2	11250	401			
GUER		390190	VERMONT	8	9	9384	4.3	398	8	13	9607	435	1	8920	394
			MASSACHUSETTS	31	35	9080	5.0	451	31	12	10171	455	1	10232	458
		394541	NEW HAMPSHIRE	1	1	5990	5.0	302	1	5	10200	378	1	9745	385
			VERMONT	26	40	7390	4.9	362	14	14	8586	383	1	8954	394
			MASSACHUSETTS	100	181	8433	5.0	415	85	10	9566	427	2	9420	426
			CONNECTICUT	2	2	7350	5.0	367	1	14	10190	485	1	9745	452
		418803	CONNECTICUT	46	49	8763	4.9	428	38	12	10536	471	1	10877	480
		493146	CONNECTICUT	7	7	7510	4.8	362	7	6	10964	461	1	9569	406
		500314	VERMONT	7	9	8848	4.9	433	6	15	9280	416	1	8462	353
			MASSACHUSETTS	14	20	8749	4.9	434	13	13	9767	429	1	9529	430
		504946	VERMONT	1	1	5120	4.3	222	1	21	7460	359	1	7990	378
			MASSACHUSETTS	6	6	10268	5.2	527	6	21	9722	437	1	10134	452
			CONNECTICUT	1	1	9780	4.9	483	1	3	10780	521			
		505079	MASSACHUSETTS	8	8	6921	5.1	351	7	19	9053	406	1	9977	450
		505970	CONNECTICUT	13	13	10012	4.4	442	10	9	10516	431	1	11000	450
		526143	MASSACHUSETTS	1	1	6120	4.4	270	1	3	8650	476	1	9854	520
HOL.		922288	NEW HAMPSHIRE	2	2	14445	3.4	487	2	12	12030	475	1	9592	507
			VERMONT	6	10	13625	3.7	507	1	29	11460	470	1	9167	403
			MASSACHUSETTS	11	16	13366	3.6	473	11	13	12402	453	1	11836	444
			RHODE ISLAND	1	2	13750	3.4	472	1	112	11130	421			
			CONNECTICUT	1449	2147	13028	3.7	494	1348	15	12712	478	1	12825	481
			NEW YORK	6	7	11858	3.6	423	6	18	12996	484	1	12077	452
			PENNSYLVANIA	4	6	13236	3.9	504	4	18	12045	452	2	13971	520
			MARYLAND	2	2	13520	3.6	505	1	3	10540	440			
			VIRGINIA	8	12	13678	3.7	504	8	16	12601	478	1	12356	465
		1019585	MASSACHUSETTS	1	1	10410	3.4	356	1	22	11060	425	1	11249	424
			CONNECTICUT	164	178	13015	3.5	461	162	16	12966	484	1	13300	496
			MARYLAND	1	1	8280	4.0	334							
			WEST VIRGINIA	2	2	13800	3.9	539	1	44	13180	488	1	13080	487
		1038118	MAINE	2	2	14205	4.5	601	2	19	15240	563	1	13963	577
			NEW HAMPSHIRE	24	25	12603	4.1	496	24	26	12692	489	1	12943	496
			VERMONT	225	279	12487	4.1	510	210	20	13168	499	1	13348	510
			MASSACHUSETTS	24	26	12111	4.2	507	23	28	13356	502	1	13538	508
			RHODE ISLAND	1	1	10100	3.8	389	1	6	10740	436	1	12241	472
			CONNECTICUT	2	2	11975	4.1	477	2	18	14405	550	1	14912	583
			NEW YORK	3	4	11245	4.3	485	2	15	13863	502	1	13789	512
			OHIO	1	1	11540	4.9	360	1	107	11910	461	1	10508	422
		1063381	VERMONT	22	23	11627	3.7	434	21	32	12889	474	1	12811	470
			MASSACHUSETTS	2	2	11240	4.2	465	2	29	13700	545	1	13260	518
		1098258	VERMONT	16	16	12886	3.5	457	16	27	12228	459	1	12480	463
			MASSACHUSETTS	91	91	12167	3.7	456	85	19	12407	468	1	13762	523
			CONNECTICUT	1	1	9660	4.1	398					1	15467	574
		1243656	VERMONT	37	38	12273	3.9	476	36	14	12267	474	1	12305	477
		1273756	CONNECTICUT	50	50	13482	3.6	511	47	17	13104	490	1	13505	504
			NEW YORK	1	1	8500	3.6	312	1	3	10690	415			

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY		MILK LB.	FAT LB.	AV. YEARLY		HERO	AV.
								NO.	RECORDS			NO.	RECORDS		
		VIRGINIA	1	1	11390	3.5	393	1	32	11960	441	1	12219	1	458
	1288194	CONNECTICUT	11	11	14891	3.9	577	11	16	13630	497	1	14744	1	539
JER.	521175	VERMONT	33	36	8060	5.4	436	27	17	8689	456	1	8867	1	458
		MASSACHUSETTS	42	61	8408	5.5	463	22	24	8002	425	1	8899	1	450
		CONNECTICUT	1	1	11680	5.5	644								
	529078	NEW HAMPSHIRE	1	1	11160	5.0	554	1	15	9190	457	1	8164	1	411
		VERMONT	28	30	8193	5.1	418	22	22	8298	435	1	9181	1	471
		MASSACHUSETTS	1	1	6680	5.2	350	1	12	8030	395	1	9058	1	445
		NEW YORK	1	1	6240	5.9	367					1	9832	1	398
	546137	MAINE	1	1	810	5.7	46	1	5	4810	282	1	8240	1	462
	546468	CONNECTICUT	46	56	8845	5.2	458	25	16	9451	507	1	9740	1	503
	552844	MAINE	1	1	5630	6.1	340	1	8	7240	409	1	8240	1	462
		CONNECTICUT	32	44	9402	5.2	488	18	11	9065	485	1	10015	1	498
	561304	MAINE	1	1	8070	4.9	399	1	8	4790	276	1	8240	1	462
		VERMONT	4	6	8178	5.6	459	4	65	9553	494	2	9386	1	487
		MASSACHUSETTS	1	2	7220	6.1	436	1	25	6380	342	1	6573	1	355
		CONNECTICUT	36	47	8691	5.5	478	17	14	9135	499	1	9868	1	505
	569466	MASSACHUSETTS	1	1	11060	5.4	596	1	1	10730	615	1	10017	1	547

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				AV. YEARLY HERD		
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
000	GUER	205987	NEW YDRK	1	3	9850	4.3	428							
		212061	NEW YORK	1	1	7230	5.0	359							
		216763	NEW YDRK	1	7	9851	4.8	471							
		218756	NEW YORK	2	3	6983	4.6	314							
		223982	NEW YORK	7	24	8572	4.6	392							
		223993	NEW YORK	2	5	8084	4.8	392							
		230914	NEW YORK	10	31	7108	5.2	369							
		238115	NEW YORK	8	20	8259	5.1	420							
		246683	NEW YORK	3	15	8369	5.1	425							
		250242	NEW YORK	4	20	9365	5.1	453							
		251445	NEW YDRK	4	7	7296	4.9	354							
	HOL.	642251	NEW YORK	17	50	11659	3.5	403							
		643579	NEW YORK MICHIGAN	22	64	11988	3.6	428							
				1	4	15005	3.5	523							
		643933	NEW YORK	7	28	10441	3.8	394							
		644883	NEW YDRK	41	112	10791	3.8	405							
		741914	NEW YORK	4	8	14508	3.6	523							
		743032	NEW YDRK	70	275	11135	3.7	415	2	15	10540	362	3	10758	388
		744661	NEW YDRK	9	24	11124	3.5	384							
		758950	NEW YORK PENNSYLVANIA	7	24	10531	3.5	366							
				1	1	11690	3.4	397							
001	AYR.	56337	NEW YORK	3	4	7962	4.2	328							
		57338	NEW HAMPSHIRE	1	4	8740	3.7	322	1	10	9233	387	4	9524	406
			VERMONT	23	70	9513	3.8	360	1	19	7420	297	1	12241	474
			MASSACHUSETTS	1	5	7832	4.7	370	1	21	9038	366	3	9021	366
			RHODE ISLAND	1	2	9535	3.7	347							
			NEW YDRK	283	870	9723	3.9	376	23	6	9629	397	2	9684	391
			PENNSYLVANIA	6	14	9885	4.0	387	4	10	9041	370	3	8893	364
			OHIO	1	1	11780	3.8	453							
			MICHIGAN	1	1	10150	3.5	359							
			MINNESOTA	1	1	10530	3.6	375	1	3	10470	377			
			IOWA	2	6	10160	3.8	385	1	6	8456	340	5	8650	342
			NEBRASKA	1	3	9537	3.5	336	1	5	5615	220	2	8175	328
			KANSAS	1	5	7692	3.8	290							
			COLDRAOQ	1	2	11665	3.7	423							
		60920	VERMONT	9	14	8412	4.2	352							
			MASSACHUSETTS	1	1	6510	4.4	289							
			NEW YDRK	75	219	8542	4.1	349	4	2	10257	406	3	9141	368
			KANSAS	1	2	7330	3.6	278							
			MARYLAND	1	2	7790	4.4	343							
			FLDRIDA	1	1	8080	4.2	339							
		61091	VERMONT	1	1	11970	4.2	499							
			NEW YORK	26	72	9137	3.9	359	1	1	15460	697			
		61498	NEW YDRK	23	82	9169	4.0	364	1	4	11176	437	3	10117	412
			PENNSYLVANIA	1	2	8210	4.5	367							
		62636	VERMONT	24	44	8615	4.1	349	8	13	8940	354	2	8893	355
			CONNECTICUT	2	5	9068	4.0	366	1	9	9535	392	3	8978	368
			NEW YORK	156	293	9705	4.1	394	70	16	10229	412	2	10240	412
			NEW JERSEY	1	1	10560	4.4	461							
			PENNSYLVANIA	214	413	8714	4.2	365	197	15	9224	378	2	9177	380
			MINNESOTA	1	1	6110	4.2	257	1	5	8710	361			
			IOWA	8	23	10213	4.2	423	8	8	10267	419	3	9376	393
			DELAWARE	2	5	7545	3.9	294	2	12	9292	375	2	8150	318
			MARYLAND	2	2	9160	3.8	344	2	26	8640	365	1	9772	396
			NORTH CAROLINA	1	1	9720	3.9	381							
		63417	VERMONT	5	10	8450	4.0	338							
			MASSACHUSLTTS	1	1	12520	4.1	514							
			NEW YORK	84	230	8858	4.0	354	7	12	10018	413	2	10415	420
			PENNSYLVANIA	3	3	8193	4.5	370	2	11	8880	372	1	8758	365

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREEO	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.		
								NO.	RECORDS	MILK LB.	FAT LB.	NO.	RECORDS	MILK LB.
		OHIO	1	1	7840	3.8	295							
		IOWA	1	1	8390	4.3	362							
		FLORIDA	2	4	5765	4.2	242							
	64873	NEW YORK	1	4	8370	4.0	328							
	67479	VERMONT	25	44	8801	4.0	355	3	4	9812	386	2	9686	383
		RHODE ISLAND	1	6	10882	3.8	417							
		CONNECTICUT	2	4	9005	4.0	364	2	12	9155	372	2	9156	375
		NEW YORK	139	315	9004	4.0	354	32	8	9639	389	2	9597	366
		PENNSYLVANIA	5	14	8536	3.9	331	4	14	8730	361	2	9424	382
		IOWA	4	9	8444	4.2	347	2	3	10703	434	5	9538	403
		NEBRASKA	1	2	8165	4.3	350							
		KANSAS	1	2	6040	4.6	278							
	67757	VERMONT	12	25	7838	4.4	340	1	20	6980	279	2	7336	284
		CONNECTICUT	3	4	11225	4.4	490	1	10	11445	474	2	10551	433
		NEW YORK	127	317	8797	4.2	369	19	8	10134	403	2	9981	396
		PENNSYLVANIA	2	4	10442	4.2	434	1	4	9357	360			
		OHIO	1	1	7460	4.5	334							
		NEBRASKA	1	5	8700	4.6	400	1	3	7688	298	4	7347	302
		NORTH CAROLINA	1	2	7180	3.8	271							
	68334	VERMONT	5	11	7528	4.1	309							
		MASSACHUSETTS	1	1	11690	4.6	538							
		NEW YORK	64	127	7646	4.3	325	5	7	10560	418	2	10203	421
		PENNSYLVANIA	1	2	6440	4.1	262	1	33	6525	265	2	6606	265
		MARYLAND	1	1	5110	3.9	197							
		COLORADO	1	3	9793	4.2	414							
	70104	NEW HAMPSHIRE	1	1	9820	3.9	383							
		VERMONT	15	27	7928	3.9	313	2	15	9100	376	2	9633	389
		CONNECTICUT	1	6	11068	3.7	406	1	22	9430	387	6	9730	397
		NEW YORK	121	249	8649	4.0	345	19	11	10057	392	2	9699	383
		IOWA	2	4	9952	4.3	422	2	6	10389	429	2	9565	399
		COLORADO	1	2	13010	4.3	563							
	71602	NEW YORK	11	25	8922	4.4	379							
		OHIO	1	8	9614	4.6	441							
	71810	VERMONT	2	2	9585	4.5	424							
		NEW YORK	13	23	8128	4.0	323	3	15	10303	428	1	10906	450
	74136	VERMONT	1	1	6910	3.8	260	1	15	7270	261	1	6998	271
		NEW YORK	25	89	9313	4.0	371	4	17	10146	413	2	9781	401
	74223	VERMONT	12	21	9600	4.0	387	4	26	10363	416	1	9901	393
		CONNECTICUT	2	2	7050	4.5	318	1	18	9520	409	1	9516	423
		NEW YORK	81	211	9012	4.3	381	11	11	9678	393	2	9410	376
		PENNSYLVANIA	2	6	10107	4.2	421	2	8	9509	394	3	9672	394
		COLORADO	1	1	6340	3.9	245							
	74434	VERMONT	9	16	8443	4.2	347	3	17	9777	385	1	9812	390
		NEW YORK	62	94	9340	4.0	377	19	15	9998	393	1	9779	382
		PENNSYLVANIA	1	1	9080	3.9	350	1	11	10500	453	1	11587	528
		IOWA	2	7	9949	4.0	397	2	5	11398	413	3	10115	390
		NORTH CAROLINA	1	1	9860	4.0	395							
	74535	NEW HAMPSHIRE	2	3	10275	4.1	423	2	15	11210	439	2	10797	425
		VERMONT	38	57	9555	4.1	393	26	26	9940	404	2	10130	414
		CONNECTICUT	1	1	9070	4.2	384	1	30	9080	370	1	9396	379
		NEW YORK	173	236	9777	4.1	402	115	18	10459	424	1	10496	422
		PENNSYLVANIA	10	11	9040	4.1	372	9	23	9992	400	1	10311	423
		NORTH CAROLINA	2	2	10815	4.4	478	1	48	11220	394	1	11183	405
	75717	NEW YORK	5	13	9049	4.3	384							
	78927	NEW HAMPSHIRE	1	1	10170	4.3	437	1	12	9380	381	1	10093	410
		VERMONT	56	95	9281	4.0	372	26	26	9846	396	2	9486	379
		RHODE ISLAND	1	1	8040	3.8	307	1	50	8990	368	1	8110	332
		CONNECTICUT	1	1	9520	4.1	388	1	18	9370	406	1	9516	423
		NEW YORK	277	484	9571	4.0	385	122	15	10264	410	1	10223	407
		PENNSYLVANIA	3	14	9669	4.1	396	3	11	8788	366	6	11009	453
		OHIO	1	5	8850	4.6	402	1	4	8543	365	4	8791	387
		MINNESOTA	1	3	7110	4.4	310	1	14	8217	330	3	8829	375
		IOWA	2	2	10325	3.7	380	2	14	10115	417			
		FLORIDA	1	1	8460	3.9	326							
		COLORADO	2	3	12525	3.9	484							
	80587	NEW YORK	11	32	9509	4.3	404	2	2	9600	381	2	9552	356
		PENNSYLVANIA	1	1	7260	4.0	294							
		SOUTH DAKOTA	1	2	7810	4.9	377	1	5	10330	406	1	9036	371
		MARYLAND	1	3	10913	4.4	475	1	15	7417	299	2	7096	301

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY	CONTEMPORARY	AV.	YEARLY	HERD	AV.	
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
GUER	BREED	81145	VERMONT	12	19	9543	4.2	389	3	11	11800	453	2	11192	440
			NEW YORK	65	137	9338	4.1	379	21	10	10413	413	2	9863	400
		83477	NEW YORK	2	6	11628	3.8	438	2	3	12707	505	2	10296	405
			84978	VERMONT	23	37	8062	4.3	344	4	11	10970	430	2	10348
		NEW YORK		87	151	9120	4.3	391	27	10	10254	409	2	10127	407
		IOWA		1	1	11090	4.2	467	1	4	11220	431	1	8807	353
		85982		VERMONT	8	15	9632	4.0	383	3	20	10395	397	1	10228
			NEW YORK	79	169	8917	4.2	370	21	17	9690	399	1	9931	406
			PENNSYLVANIA	1	7	9051	4.4	394	1	6	8937	355	5	9782	397
			WISCONSIN	1	1	8500	4.4	372	1	7	9510	384			
			NEBRASKA	1	3	6573	4.4	292							
		87503	VERMONT	28	40	10034	3.9	388	21	32	9688	391	1	9888	395
			MASSACHUSETTS	1	1	9920	4.3	428	1	17	8700	424	1	8982	432
			RHODE ISLAND	1	1	9830	3.9	384	1	33	8780	349	1	9766	388
			NEW YORK	169	303	10190	3.9	398	84	18	10093	400	1	10208	406
			PENNSYLVANIA	2	2	7145	3.9	271	2	10	9315	387	1	10350	434
			IOWA	2	2	11765	4.4	515	2	14	11650	485			
			WASHINGTON	2	2	7715	4.1	316	2	22	8250	333	1	8873	364
		87504	VERMONT	4	16	8039	3.8	306							
			NEW YORK	46	123	9485	3.8	358	3	12	10754	397	2	10420	390
			OHIO	1	3	10257	3.7	375	1	3	9637	381	1	10213	379
		89353	VERMONT	11	15	8240	4.2	342	5	31	9666	394	1	10264	413
			NEW YORK	97	167	10491	4.0	420	63	19	10657	429	1	10797	434
			PENNSYLVANIA	1	1	13270	3.3	439	1	13	8430	333	1	9995	407
		94066	VERMONT	4	6	7344	4.0	296	1	20	6965	279	2	7336	284
			NEW YORK	29	53	8163	4.1	332	5	6	9135	365	2	9040	361
			IOWA	1	1	9030	4.3	390							
			NEBRASKA	1	2	6710	4.5	302							
		94239	VERMONT	2	4	10392	3.9	399							
			NEW YORK	36	74	8336	4.2	345							
			NEBRASKA	1	2	10290	4.5	466	5	8	9610	376	2	9284	370
		95557	VERMONT	3	4	7960	4.1	321	2	8	9378	374	2	10309	414
			NEW YORK	20	23	9640	4.1	394	16	20	10486	414	1	10562	420
		98367	VERMONT	1	1	11850	4.2	499	1	107	11910	462	1	10508	422
			NEW YORK	13	13	10398	4.2	429	13	18	10795	429	1	10266	404
			IOWA	1	1	9780	3.9	381	1	53	10490	410			
			VIRGINIA	1	1	10330	4.1	426					1	9429	401
		101527	VERMONT	35	38	10157	4.2	423	32	26	9758	394	1	10307	413
			MASSACHUSETTS	3	3	13620	4.0	543	2	52	12740	520	1	11870	498
CONNECTICUT	1		1	9420	4.5	424	1	141	9520	369	1	8164	329		
NEW YORK	117		137	10487	4.2	436	113	18	10378	415	1	10554	423		
PENNSYLVANIA	2		2	10835	3.8	413	2	6	10460	386	1	12688	477		
IOWA	2		2	12085	4.4	523	2	34	11055	447					
MARYLAND	1		2	9650	4.3	414	1	84	11610	475	1	9908	404		
VIRGINIA	1		1	9530	3.9	373	1	21	7940	331					
WASHINGTON	1		1	8640	4.0	349	1	20	8820	360	1	9091	370		
102600	VERMONT	1	2	8895	4.2	369	1	2	10000	409	2	8410	330		
	NEW YORK	32	49	9585	4.1	396	15	13	9504	382	1	9988	402		
102601	VERMONT	5	9	9646	3.8	368	3	14	10617	415	1	10955	431		
	NEW YORK	31	43	9386	4.1	386	10	11	10590	419	1	10781	418		
	PENNSYLVANIA	1	4	11678	3.8	448	1	13	10848	392	4	11895	441		
107869	VERMONT	8	8	10348	4.2	433	8	33	10974	441	1	11436	463		
	MASSACHUSETTS	1	1	11070	3.8	426	1	39	13130	542	1	11870	498		
	NEW YORK	36	43	9723	4.2	403	34	19	10071	401	1	10259	414		
	PENNSYLVANIA	1	2	9285	4.5	414	1	16	9330	387	2	9521	396		
	IOWA	1	1	3060	4.8	147	1	11	11380	453	1	9766	389		
	DELAWARE	1	1	9540	5.2	496	1	35	9360	399	1	9799	425		
108935	VERMONT	6	8	9478	4.2	392	5	22	9884	403	2	10512	419		
	NEW YORK	54	75	9081	4.1	371	31	17	10326	413	1	10536	426		
	GEORGIA	1	1	6710	4.0	270	1	9	8910	342					
110758	VERMONT	5	6	8430	4.1	352	5	19	9668	381	1	9880	396		
	CONNECTICUT	1	1	11820	4.2	494	1	14	10710	418	1	9908	386		
	NEW YORK	64	75	9564	4.2	400	61	18	10385	415	1	10458	419		
	IOWA	1	1	10130	4.6	465	1	1	3630	212	1	8993	366		
GUER	209999	NEW YORK	14	46	7621	4.8	364								
	210468	NEW YORK	22	57	7580	5.2	390								

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				AV. YEARLY HERD			
								NO. O.AUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	
	216597	NEW YORK	24	86	7976	4.8	378								
	220600	NEW YORK	11	30	8179	4.5	373								
		ILLINOIS	1	1	8700	4.5	395								
	223971	CONNECTICUT	1	3	7123	4.3	305								
		NEW YORK	37	101	8415	4.7	391								
	234307	NEW YORK	2	4	7418	5.3	389								
	237356	NEW YORK	47	147	8084	4.7	375								
	242739	VERMONT	1	1	14250	4.2	604								
		NEW YORK	72	187	7593	5.0	382	3	16	8676	400	2	8439	408	
		MARYLAND	1	2	6965	4.9	339								
	243870	VERMONT	2	5	7803	4.9	377								
		NEW YORK	98	255	7563	4.8	361	3	5	9001	442	3	8923	422	
		NEW JERSEY	1	2	7115	5.3	377								
		PENNSYLVANIA	1	1	15350	4.3	666	1	4	8630	437	1	10192	523	
	243903	NEW YORK	4	7	5904	4.8	284								
	250370	NEW YORK	10	25	8293	4.8	394								
	251242	NEW YORK	6	23	8769	4.7	410								
	251248	VERMONT	1	4	8133	4.7	384								
		CONNECTICUT	1	6	10750	5.6	602	1	20	10237	495	2	11483	566	
		NEW YORK	14	59	7826	5.1	394								
	253115	VERMONT	1	1	8530	4.7	402								
		CONNECTICUT	1	2	6745	4.5	304	1	9	7000	330	1	7652	353	
		NEW YORK	73	189	7920	4.8	378								
	253783	NEW YORK	15	43	6892	5.0	343								
		PENNSYLVANIA	1	10	8539	4.3	368	1	7	8626	403	4	8835	417	
	262420	NEW YORK	6	13	8204	4.9	399								
		PENNSYLVANIA	1	1	7740	4.7	364								
	268347	NEW YORK	27	75	7973	4.9	392								
	281910	NEW YORK	38	114	8289	4.9	406								
	285310	NEW YORK	5	11	9334	4.6	422								
	286688	MASSACHUSETTS	8	24	8339	4.9	406	4	12	9232	447	3	8907	428	
		NEW YORK	8	18	8633	4.9	424								
	287312	CONNECTICUT	1	1	7110	4.2	300								
		NEW YORK	24	61	7437	4.9	361								
	287967	VERMONT	7	14	8577	4.8	408								
		CONNECTICUT	4	8	10224	4.6	472	2	15	9180	431	2	9096	430	
		NEW YORK	273	726	8764	4.8	417	32	11	9529	430	2	9363	433	
		NEW JERSEY	1	2	7175	5.1	360								
		TENNESSEE	1	2	12595	4.9	614								
	288095	VERMONT	1	3	9087	4.4	397								
		MASSACHUSETTS	1	3	9567	5.1	487	1	17	10255	462	1	9559	449	
		NEW YORK	77	159	7346	4.8	354	1	9	7735	367	3	7532	363	
		VIRGINIA	1	2	8045	5.3	422								
	289531	VERMONT	10	30	7893	4.9	385								
		CONNECTICUT	1	1	6450	4.5	293								
		NEW YORK	179	455	8007	4.9	394	22	8	8759	415	1	9021	424	
		OHIO	1	1	6270	5.1	321								
		VIRGINIA	2	7	6902	4.9	335								
		FLORIDA	2	4	7615	4.5	340								
	289863	VERMONT	4	8	7400	5.5	407								
		MASSACHUSETTS	2	4	6175	5.0	308	1	11	7270	350				
		NEW YORK	200	455	7398	5.1	373	12	21	8835	418	1	9286	436	
		NEW JERSEY	4	11	9076	4.9	445								
		PENNSYLVANIA	1	1	5220	4.8	250	1	6	6990	320	1	6845	375	
		TEXAS	1	1	14900	4.3	647								
	293567	MASSACHUSETTS	1	6	6832	5.3	360	1	2	7482	365	1	7129	350	
		NEW YORK	13	33	8292	5.0	411	1	15	7980	392	1	8567	423	
	294499	NEW YORK	21	67	8163	4.6	373								
	298216	VERMONT	13	23	9658	4.4	421	5	7	12765	512	1	11491	462	
		MASSACHUSETTS	2	5	8193	4.4	360	2	18	8732	404	3	8236	388	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				AV. YEARLY HERO		
								NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		CONNECTICUT	5	16	10303	4.6	482	3	18	10113	487	4	9384	460
		NEW YORK	249	448	8935	4.5	402	82	12	9220	420	2	9309	430
		VIRGINIA	3	6	10508	4.8	507							
		FLORIDA	2	4	7155	4.9	359	1	91	8455	393			
		TENNESSEE	1	2	9860	4.5	420							
	302625	VERMONT	3	6	7389	4.8	350							
		NEW YORK	84	198	8212	4.9	403	10	8	8276	391	2	7864	375
	308548	VERMONT	2	5	8681	4.2	372							
		CONNECTICUT	1	3	16220	4.5	721	1	9	13400	625	3	12844	609
		NEW YORK	31	82	8195	4.7	383	2	3	8689	421	2	9381	437
		NEW JERSEY	1	3	7550	5.0	382							
	316765	NEW YORK	9	13	7554	5.3	399	3	10	7243	343	1	8335	381
	318274	NEW YORK	14	76	8729	4.9	428							
	321300	VERMONT	2	5	7449	4.2	316							
		NEW YORK	23	52	6872	4.7	319							
	322600	CONNECTICUT	1	6	7562	4.9	370							
		NEW YORK	34	106	7693	5.0	384	2	10	10164	464	2	9146	421
		NEW JERSEY	1	2	9755	4.1	403					1	10410	505
		NEW MEXICO	1	2	8430	4.6	386							
	322660	NEW YORK	88	274	8287	5.1	425	4	10	9773	464	1	9134	438
	323584	VERMONT	9	21	6932	4.6	315							
		MASSACHUSETTS	1	2	11565	5.1	585	1	100	14250	545	2	13385	517
		NEW YORK	103	205	8233	4.7	382	20	15	8423	408	2	9014	430
		PENNSYLVANIA	2	3	8353	4.8	400	1	21	7795	369	2	7445	351
		NORTH CAROLINA	1	3	8910	4.7	428	1	54	7430	362	1	6714	313
	326463	NEW YORK	27	64	7228	4.9	354					2	9658	460
	327728	NEW YORK	8	19	7653	4.6	349							
	331204	MAINE	1	1	14520	4.6	664	1	9	13090	667	1	9374	448
		VERMONT	2	4	6659	4.7	308							
		MASSACHUSETTS	2	6	7564	5.5	416	2	80	11318	489	2	10492	466
		CONNECTICUT	2	5	8163	5.1	410	2	27	10420	511	3	11324	557
		NEW YORK	235	427	8209	4.7	384	49	20	8923	424	2	9290	440
		NEW JERSEY	1	2	7030	4.8	336	1	15	8770	418			
		PENNSYLVANIA	7	15	8163	4.8	396	6	17	8257	382	2	9490	446
		OHIO	1	1	9760	5.0	485	1	36	10760	534			
		INDIANA	3	3	12163	4.9	583	1	17	12260	607	1	10944	560
		NEBRASKA	1	1	4930	4.1	204							
		NORTH CAROLINA	1	3	7880	4.6	365	1	11	7917	370	3	8724	408
	332084	NEW YORK	15	32	6746	4.9	329	1	9	7950	372	1	8666	410
	335736	VERMONT	2	6	6834	5.0	340							
		CONNECTICUT	4	10	9328	4.5	412	4	16	9536	458	2	9282	453
		NEW YORK	92	230	8194	4.7	382	4	7	9920	445	2	10868	482
		IOWA	1	1	11290	4.5	504	1	7	10660	462			
		NEBRASKA	1	1	3000	5.0	150							
		VIRGINIA	1	3	8423	5.0	415							
		NORTH CAROLINA	2	10	10390	4.5	470	2	68	7808	370	3	6168	339
		TENNESSEE	1	2	10850	4.4	476	1	36	10060	461	1	9766	493
	340243	VERMONT	4	11	7327	4.5	325							
		CONNECTICUT	1	4	10853	4.8	518	1	5	10023	463	4	8442	419
		NEW YORK	95	218	8978	4.5	399	12	16	9289	421	2	9029	418
		VIRGINIA	2	2	6495	5.2	337							
	340985	VERMONT	6	17	8416	4.8	404	1	5	8610	355	1	8796	376
		NEW YORK	213	447	8150	4.8	392	51	11	8735	401	1	9044	423
		NEW JERSEY	1	1	9460	5.4	509							
		PENNSYLVANIA	1	5	6544	5.1	337	1	11	8632	395	2	9625	426
		OHIO	1	1	11250	4.4	499	1	11	10470	472	1	10442	477
		VIRGINIA	1	1	9500	5.2	490							
	341437	NEW YORK	62	188	8036	4.9	394	1	2	7853	362			
	343639	NEW YORK	1	3	8663	4.6	395							
	344841	VERMONT	7	19	8065	4.9	391							
		NEW YORK	179	390	8197	4.8	392	34	19	8644	404	2	8943	416
		NEW JERSEY	1	4	10295	5.0	511	1	3	8630	439	3	9708	452
		VIRGINIA	3	9	7406	4.9	362							
		NORTH CAROLINA	1	3	9587	4.0	319	1	125	8180	400	3	5555	360
		FLORIDA	1	1	6220	4.9	305							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.			
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	
	345919	NEW YORK	12	40	8127	4.6	375								
	346708	VERMONT	6	11	8005	4.9	394								
		NEW YORK	188	396	8203	5.1	415	28	12	9270	435	2	9584	453	
		NEW JERSEY	1	3	10277	4.7	481								
		FLORIDA	1	1	5280	4.6	245								
	346824	VERMONT	5	9	8009	4.9	393	2	16	7510	308	1	8077	298	
		NEW YORK	83	154	8065	5.0	403	13	8	7704	353	1	8547	395	
	349648	VERMONT	4	8	8825	4.8	419	1	57	9660	446	2	9865	465	
		NEW YORK	66	121	8638	4.5	392	19	19	9251	436	1	9335	450	
		NORTH CAROLINA	1	3	8087	4.2	344	1	102	8690	403	2	7865	366	
		FLORIDA	1	1	8550	4.2	362								
	357749	VERMONT	8	10	8468	4.5	375	5	15	8474	356	1	9173	385	
		MASSACHUSETTS	1	3	7030	5.0	348	1	11	7240	348				
		CONNECTICUT	1	4	9548	4.6	440	1	32	9338	435	3	9494	436	
		NEW YORK	185	376	8568	4.6	395	53	16	9105	417	1	9329	428	
		PENNSYLVANIA	1	1	9520	4.6	436	1	12	10540	407	1	12873	471	
	357789	NEW YORK	2	3	7275	4.7	339								
	358311	VERMONT	3	4	9255	4.3	390	1	24	10560	423	1	10682	419	
		NEW YORK	28	41	8239	4.7	390	9	9	9184	415	2	9276	424	
	359070	VERMONT	14	28	7620	4.9	368								
		CONNECTICUT	2	7	10387	4.8	497	1	5	11272	519	3	12844	609	
		NEW YORK	244	625	8243	4.9	404	30	16	8930	419	2	9152	427	
		NEW JERSEY	1	1	8216	5.1	419								
		MARYLAND	1	1	8300	5.4	445								
		NORTH CAROLINA	1	3	8520	4.2	349	1	99	8610	397	2	7865	366	
	366730	NEW YORK	42	76	8362	4.7	396	5	16	9000	414	2	9290	444	
		NORTH CAROLINA	1	2	8760	4.4	380	1	87	8190	382	1	6911	327	
	367271	CONNECTICUT	1	1	7370	4.3	315								
		NEW YORK	22	56	8320	4.7	389	2	6	9668	470	3	9636	442	
	373403	VERMONT	9	18	8087	4.8	393	2	10	8555	385	1	8796	376	
		NEW YORK	236	541	8544	4.6	391	43	10	8404	406	2	8827	410	
		PENNSYLVANIA	1	3	8073	4.9	391								
		NEBRASKA	1	2	6010	4.8	286								
	373405	VERMONT	1	6	7783	4.8	367								
		NEW YORK	16	34	8151	4.7	385	2	54	9814	442	2	9064	427	
	375111	VERMONT	4	9	8883	4.8	422								
		NEW YORK	18	43	7765	5.1	391	2	4	11092	443	3	9462	411	
	375225	VERMONT	5	13	7276	4.8	347	2	9	8119	382	4	8277	391	
		NEW YORK	29	55	7929	5.0	391	6	18	9085	398	2	8968	403	
	377906	NEW YORK	35	49	8456	4.5	383	10	13	9582	416	1	9615	415	
	380916	NEW YORK	27	61	7131	4.7	333	3	5	8654	419	3	8577	421	
		VIRGINIA	1	2	8150	4.5	364								
	381231	NEW YORK	6	12	7687	5.0	385	1	36	10310	518	2	10758	534	
	382148	NEW YORK	8	18	7344	4.9	358	3	2	8947	433	1	7881	380	
	383718	VERMONT	1	5	7020	4.5	315								
		NEW YORK	45	140	8359	4.9	406	6	16	10111	443	1	9750	440	
	384111	NEW YORK	2	2	10750	4.6	493	2	12	10590	418	1	11222	454	
	388784	NEW YORK	16	37	7280	4.7	342	2	8	7968	350	2	9028	381	
		PENNSYLVANIA	1	1	8800	4.7	412	1	9	9290	371	1	9450	379	
	391990	NEW YORK	3	8	8443	4.5	380	1	5	8550	373	3	7634	364	
	398391	VERMONT	2	7	7969	4.9	395								
		MASSACHUSETTS	1	4	11600	4.8	553	1	78	12665	505	4	12208	497	
		NEW YORK	82	115	7593	5.1	387	48	12	9137	412	1	9124	421	
	401324	CONNECTICUT	1	1	9020	4.3	388	1	17	9000	428	1	10301	468	
		NEW YORK	29	79	8148	4.7	378	3	12	9162	444	3	9480	461	
	409202	VERMONT	1	1	6590	5.2	343	1	15	10690	415	1	10682	419	
		NEW YORK	21	23	7957	4.9	396	19	13	9024	394	1	9706	433	
	420819	NEW YORK	19	43	7960	4.8	383	2	11	9750	447	1	10186	479	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY NO. RECORDS OAS.	MILK LB.	FAT LB.	YEARLY HERO RECORDS NO.	MILK LB.	AV. FAT LB.
	420820	NEW YORK	3	9	6835	4.9	347	1	1	11207	529	3	8960 459
	423102	VERMONT	1	1	7050	4.8	341						
		NEW YORK	31	80	7792	4.8	375	6	13	10179	441	2	10184 440
		PENNSYLVANIA	1	1	3740	4.3	161	1	12	9300	322	1	10846 378
	424387	NEW YORK	5	11	8803	4.9	426	1	38	8415	429	2	8998 460
	425345	VERMONT	2	3	8653	4.8	409	1	33	10280	395	1	10824 420
		MASSACHUSETTS	1	1	8590	5.3	452	1	10	9310	444	1	8742 416
		NEW YORK	73	100	8559	4.9	421	49	13	8778	400	1	9228 427
	425570	NEW YORK	29	45	7405	5.2	381	9	20	8612	379	1	8643 377
	445009	NEW YORK	21	39	7482	4.7	352	1	5	8120	436	1	8764 438
	457382	VERMONT	2	3	6325	5.0	313						
		NEW YORK	21	34	8074	4.6	371	2	7	9914	479	2	10767 509
	461736	VERMONT	1	1	6760	5.2	350	1	33	10340	397	1	10824 420
		NEW YORK	31	41	7178	4.6	326	18	10	8386	391	2	8850 418
	465977	VERMONT	1	1	3380	4.4	147	1	20	6860	242	1	8077 298
		NEW YORK	33	50	8280	4.7	392	6	12	8328	389	1	8965 429
	488679	NEW YORK	11	14	6800	5.1	340	1	2	9290	367		
	488856	NEW YORK	4	6	8838	4.6	408						
	497294	NEW YORK	22	24	8210	4.7	385	14	10	8698	395	1	9474 442
	497553	VERMONT	1	1	4640	4.3	198	1	16	7610	316		
		NEW YORK	13	13	8185	4.6	374	10	6	8678	404	1	8765 396
	503506	VERMONT	1	1	7020	4.1	287	1	16	7460	311		
		NEW YORK	11	15	8480	4.7	396	11	10	8842	411	1	9017 427
	503512	VERMONT	2	2	7135	4.6	323	1	4	7680	309	1	8355 348
		NEW YORK	14	17	9215	4.9	453	13	10	8726	417	1	9053 429
	509446	NEW YORK	5	8	8959	4.7	418	5	23	8188	385	2	8736 401
	512302	NEW YORK	14	15	9055	4.9	416	13	14	8688	408	1	9567 443
	516504	NEW YORK	7	8	8257	4.7	395	7	13	8412	415	1	9175 431
	518779	NEW YORK	1	1	6640	4.1	271					1	9156 446
	521147	NEW YORK	1	1	8840	4.4	390	1	12	8560	382		
	521150	VERMONT	1	1	6930	4.2	334	1	17	8090	345	1	8796 376
		NEW YORK	5	5	8724	4.5	399	4	14	10340	446	1	10168 445
	523717	NEW YORK	8	8	6316	4.8	304	7	7	6883	317	1	9287 441
	526551	NEW YORK	5	5	7200	4.9	354	5	10	9036	435	1	9331 438
	526594	NEW YORK	4	5	7670	4.5	345	3	8	4933	235	1	9529 417
HOL.	639681	VERMONT	1	3	10447	3.9	413						
		NEW YORK	12	36	9901	3.5	348						
	658861	NEW YORK	67	172	11362	3.4	387	1	7	10900	411	2	12290 454
	659555	NEW YORK	86	290	11059	3.6	395						
	669461	NEW YORK	5	14	11279	4.0	444						
	675043	NEW YORK	250	813	12923	3.4	439	2	18	12599	461	1	11805 405
		NEW JERSEY	2	6	13627	3.6	485						
		PENNSYLVANIA	3	8	14111	3.4	482	1	11	12618	430	1	13080 455
		OHIO	1	1	10690	3.0	323						
		MICHIGAN	1	3	15240	3.6	551						
		MINNESOTA	1	2	10085	3.7	373						
	675045	NEW YORK	34	110	12053	3.5	416						
	675347	NEW YORK	14	31	11466	3.7	417						
	679651	NEW YORK	150	556	11621	3.6	418						
		OHIO	1	6	12892	3.6	468	1	16	12678	447	3	11819 420
		MARYLAND	2	5	11026	3.6	392						
		WEST VIRGINIA	1	1	11430	4.1	469						

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREEO	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.			
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	
680074	NEW HAMPSHIRE	1	8	12156	3.6	430	1	7	11973	430	4	11887	433		
		1	1	7600	3.5	275									
		MASSACHUSETTS	1	1	13670	2.9	391								
		NEW YORK	263	862	11428	3.7	418	3	4	11560	437	2	10677	412	
		NEW JERSEY	1	1	16340	3.5	574								
		PENNSYLVANIA	3	7	12721	3.3	417								
		MARYLAND	9	16	9947	3.7	362	1	14	12190	456	3	12452	459	
690781	NEW YORK	2	4	5904	3.6	211									
692498	NEW YORK	10	36	12388	3.5	433									
701962	NEW YORK	61	163	11240	3.5	390									
701962	PENNSYLVANIA	16	47	9862	3.7	362									
		6	22	11356	3.6	406	3	8	10652	392	2	9527	345		
702224	VERMONT	2	12	14732	3.7	543									
		NEW YORK	68	221	12261	3.6	436	1	57	11985	440	2	12138	444	
		VIRGINIA	1	1	12850	3.3	430								
704766	VERMONT	1	4	9195	3.6	325									
		NEW YORK	11	35	11586	3.6	416								
705101	VERMONT	1	3	9950	3.9	388									
		NEW YORK	42	115	11170	3.6	406								
		NEW JERSEY	1	1	6650	3.6	236								
		MARYLAND	1	1	11280	4.0	447								
709944	NEW YORK	116	341	11303	3.5	387									
713429	VERMONT	1	2	9605	3.7	351									
		NEW YORK	86	235	11185	3.6	401								
		PENNSYLVANIA	1	2	10650	3.4	352	1	8	8280	295	1	8415	328	
715812	VERMONT	1	2	8720	3.6	310									
		MASSACHUSETTS	1	6	11390	3.6	409	1	12	11875	448	1	12818	457	
		NEW YORK	119	290	11943	3.5	410	3	11	10660	399	1	11082	410	
		MARYLAND	1	4	13975	3.4	472								
718393	NEW YORK	74	176	10322	3.4	353									
		PENNSYLVANIA	1	1	8360	3.6	305								
718673	NEW YORK	37	114	11629	3.5	404									
		MARYLAND	1	1	9490	3.4	323	3	5	11280	416	1	13494	474	
719452	CONNECTICUT	1	2	12895	3.5	449									
		NEW YORK	6	17	11366	3.7	415								
719538	NEW YORK	2	3	10880	3.5	384									
719598	NEW YORK	85	301	12220	3.6	437									
		NEW JERSEY	1	1	13160	3.4	453								
725502	NEW YORK	56	208	12072	3.4	408									
		PENNSYLVANIA	2	10	12003	3.6	433	1	7	13448	484	1	12644	473	
727609	VERMONT	5	16	10964	3.7	407									
		CONNECTICUT	1	1	14820	3.8	565								
		NEW YORK	565	1959	11757	3.6	420	12	10	12407	448	1	12624	458	
		NEW JERSEY	1	1	9660	3.4	331								
		PENNSYLVANIA	3	9	12823	3.6	467	1	7	12303	461				
		OHIO	1	6	11387	3.7	421	1	14	12572	440	2	12050	424	
		KANSAS	1	2	9465	3.9	365								
		MARYLAND	1	2	8410	3.5	291								
737915	VERMONT	8	21	10859	4.0	426									
		RHODE ISLAND	1	2	10090	3.7	372								
		CONNECTICUT	1	3	9773	3.5	339	1	6	9750	337	3	9748	334	
		NEW YORK	479	1368	10409	3.8	391	18	20	12572	450	2	12356	440	
		PENNSYLVANIA	1	4	11508	3.8	438	1	5	12978	458	2	11369	430	
		OHIO	1	3	9800	3.8	372								
		WISCONSIN	1	1	12040	3.5	416								
		MARYLAND	1	7	13160	3.5	460								
739272	NEW YORK	56	217	11399	3.6	405									
		NEW JERSEY	1	2	9595	3.6	339	1	3	11930	410	4	12748	439	
741370	VERMONT	1	2	9870	3.2	315									
		NEW YORK	18	65	11566	3.5	398	2	4	10933	425	3	11768	440	
		PENNSYLVANIA	1	1	12350	3.3	407								
		MICHIGAN	1	2	10205	3.1	329								
		MARYLAND	1	4	12268	3.6	437	1	6	8147	282				
741493	VERMONT	2	3	11620	3.8	433									
		NEW YORK	124	380	12007	3.9	471	3	6	14791	553	2	13829	526	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.		
								NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		PENNSYLVANIA	1	7	13079	3.3	432	1	10	10444	380	2	11195	397
753496	VERMONT	MASSACHUSETTS	9	31	11053	3.5	381	1	8	13770	488	3	12012	440
			2	14	14308	3.4	485	2	11	12664	457	2	12656	450
			229	684	11911	3.5	415	5	5	13573	484			
755101	VERMONT	CONNECTICUT	8	23	11373	3.5	398	1	15	9750	372	1	10213	389
			1	6	10147	3.7	372	1	25	13435	520	3	13440	535
			150	390	11735	3.7	427	6	20	13991	508	1	12528	455
			1	1	6980	3.7	260							
			3	7	12297	3.3	405	3	10	11674	398	2	12435	431
758327	VERMONT	NEW YORK	1	3	12670	3.6	460							
			43	99	11500	3.4	386	1	9	10663	373	3	13687	448
761977	VERMONT	MASSACHUSETTS	34	90	11632	3.7	426	3	31	13353	525	1	13349	508
			5	16	14396	3.6	517	2	54	12174	446	2	12085	463
			1	3	10670	3.7	396	1	8	12765	465	2	10922	389
			8	41	14360	3.6	508	7	16	14350	500	3	12825	463
			1615	4715	12529	3.7	463	390	14	12979	473	2	12695	462
			3	10	10730	3.8	399	1	79	11170	404	1	12132	453
			18	53	13071	3.7	486	13	11	12014	452	2	12052	458
			2	9	13325	3.7	486	2	13	13320	494	3	12583	446
			1	1	17060	4.5	766							
			2	2	13315	3.8	496							
			3	4	10448	3.5	367							
			4	17	11063	3.6	397	4	18	11248	405	3	10785	386
			14	23	14234	3.8	542	8	25	14336	536	1	13887	523
			1	8	12629	3.7	460	1	16	12724	465	4	12116	432
			1	1	10510	3.2	341	1	1	11470	457			
766065	VERMONT	MASSACHUSETTS	16	47	11115	3.5	384							
			3	7	12151	3.7	447	2	23	13049	483	2	13084	473
			3	9	10887	3.6	385	2	12	11998	436	1	12437	447
			707	2124	11718	3.6	418	26	12	12356	446	2	12319	447
			1	1	7850	3.4	269							
			4	9	10237	3.5	351	2	10	11889	425	1	11413	410
			1	4	11133	3.8	421	1	16	12445	441	1	11358	411
			1	2	14985	3.7	544							
			6	27	10676	3.6	380	3	11	12328	430	5	11856	413
			1	1	7360	3.9	284							
			1	1	11340	3.4	384							
771602	VERMONT	CONNECTICUT	7	20	10258	3.8	383							
			1	4	13338	3.3	430	1	26	17480	567			
			158	451	10695	3.7	393	7	15	13121	471	2	13102	472
			2	6	10704	3.8	411	1	2	11925	429	2	10595	384
			1	2	10235	4.5	452	1	12	11335	426	1	10617	405
773222	NEW YORK		43	144	11248	3.5	390							
773861	NEW YORK		41	163	11493	3.5	400	1	1	14310	466			
777177	NEW HAMPSHIRE	VERMONT	2	11	13621	3.5	467	2	6	11492	431	3	10594	390
			18	37	10960	3.8	406							
			2	4	10892	3.5	378	2	7	12725	447	2	11838	416
			549	1395	10717	3.6	387	36	11	11976	436	2	11796	428
			4	8	14796	3.7	541	3	15	12071	450	2	11963	436
			3	7	10464	3.6	369	1	16	11400	410	1	12164	435
778322	VERMONT	NEW YORK	1	1	8590	3.7	321							
			159	559	11885	3.5	415	10	14	12162	444	2	12053	436
			2	9	12936	3.5	448	1	3	11953	437	3	10188	366
			1	1	11560	2.9	338							
778551	NEW YORK	MARYLAND	96	287	12097	3.6	432							
			2	2	12210	4.0	481							
780042	NEW YORK	MARYLAND	51	136	11612	3.4	405							
			1	7	14030	3.4	476	1	10	11900	415	4	11595	401
783017	VERMONT	NEW YORK	2	5	12096	3.5	426							
			64	152	11172	3.6	395							
			1	1	11580	3.8	443							
			1	1	13150	3.2	423							
			1	1	6920	4.0	278							
784131	NEW HAMPSHIRE	NEW YORK	1	6	12958	3.7	473	1	8	11918	424	4	11328	403
			38	81	12092	3.7	444	7	30	12204	433	1	12138	436
784231	VERMONT	CONNECTICUT	8	25	11022	3.8	420							
			1	5	12106	3.8	465	1	9	13078	464	2	11162	404
			474	1384	12133	3.7	450	38	10	12375	446	2	11756	424
			1	2	7950	4.1	520							

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.		
								NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		PENNSYLVANIA	5	11	11509	3.4	391	2	8	10212	387	2	10053	378
		MARYLAND	3	18	12854	3.5	449	2	13	11883	419	4	11611	417
		VIRGINIA	2	3	14460	3.7	523	1	25	12770	482	1	13799	536
		SOUTH CAROLINA	1	2	10740	4.1	438							
784779		VERMONT	2	4	14368	3.7	526							
		CONNECTICUT	1	4	8320	3.6	298	1	6	8868	309	3	9748	334
		NEW YORK	34	95	12760	3.6	456	4	14	12457	466	2	11955	431
786552		NEW YORK	58	202	12234	3.6	439							
787323		VERMONT	9	21	12735	3.7	464							
		CONNECTICUT	1	6	10933	3.4	371	1	14	9414	355	3	9640	350
		NEW YORK	292	836	12136	3.4	409	15	9	12466	449	2	12249	442
		PENNSYLVANIA	1	1	12880	3.2	414							
		OHIO	1	1	11240	3.2	364							
788399		NEW HAMPSHIRE	1	1	12540	3.1	387	1	12	10470	357	1	14148	500
		VERMONT	20	42	10932	3.5	380							
		MASSACHUSETTS	1	4	15338	3.2	491	1	10	14840	494	1	15195	568
		CONNECTICUT	1	5	12576	3.5	442	1	16	11798	453	4	12255	482
		NEW YORK	564	1595	11583	3.5	402	28	10	12953	470	2	12436	446
		NEW JERSEY	3	17	11328	3.6	411							
		PENNSYLVANIA	7	22	13197	3.4	448	6	11	12483	444	3	12394	451
		MARYLAND	4	7	11172	3.8	414	1	5	12230	443	2	12857	476
792315		NEW HAMPSHIRE	1	1	16070	4.0	637							
		NEW YORK	212	569	10351	3.7	381	1	5	12133	448	1	11630	421
		PENNSYLVANIA	1	1	19090	3.5	674							
798451		MAINE	1	5	13472	4.3	570	1	4	14110	548	1	12382	469
		NEW HAMPSHIRE	1	3	17690	3.5	617	1	7	12217	445	1	14148	500
		VERMONT	22	52	10295	3.7	378							
		MASSACHUSETTS	2	7	14355	3.4	484	2	39	12989	485	1	12383	469
		CONNECTICUT	2	2	11175	3.7	406							
		NEW YORK	857	2578	11710	3.6	418	30	10	12550	453	2	12770	462
		NEW JERSEY	1	1	9620	4.4	425							
		PENNSYLVANIA	4	12	13053	3.4	449	3	5	12918	459	2	12158	452
		ILLINOIS	3	5	11457	3.6	402	1	13	10707	381	3	10431	369
		MICHIGAN	1	1	9830	3.3	324							
		WISCONSIN	1	1	11160	3.8	421							
		SOUTH DAKOTA	1	1	12370	3.6	445							
		MARYLAND	5	12	10954	3.6	384	2	17	12242	435	2	12181	428
799843		PENNSYLVANIA	19	47	11988	3.8	451	2	6	12179	444			
		MARYLAND	1	1	9660	3.7	355	1	38	12320	573	1	11816	560
799846		CONNECTICUT	1	1	14600	3.7	540							
		NEW YORK	72	220	10788	3.6	384							
		PENNSYLVANIA	3	3	8093	3.5	287	1	28	10550	337			
		WEST VIRGINIA	1	4	14533	3.0	438							
808678		VERMONT	6	13	11965	3.7	429	1	34	11390	408	1	10889	388
		NEW YORK	114	327	11524	3.5	403	9	4	12439	459	3	11828	429
		PENNSYLVANIA	1	4	15258	3.3	509	1	4	13440	491	3	14243	523
		VIRGINIA	1	1	10580	2.8	297							
808916		VERMONT	6	17	13057	3.4	443							
		MASSACHUSETTS	1	1	9510	3.2	305							
		CONNECTICUT	1	4	16818	3.7	609							
		NEW YORK	87	209	11054	3.5	384	4	6	12430	457	2	12384	450
		NEW JERSEY	1	6	11790	3.9	456							
810427		VERMONT	7	20	9624	3.8	368							
		MASSACHUSETTS	1	2	15400	4.1	634							
		CONNECTICUT	1	2	15445	4.1	619	1	19	14100	550	2	14345	558
		NEW YORK	248	680	11121	3.7	413	9	5	11571	418	2	11719	415
		MARYLAND	1	9	11331	3.7	420	1	14	12318	430	6	12363	431
815236		NEW HAMPSHIRE	1	3	12813	3.4	446	1	5	11157	396			
		VERMONT	19	40	10850	3.7	399	1	4	11830	433			
		MASSACHUSETTS	1	6	14780	3.5	516	1	19	13187	478	4	12388	448
		CONNECTICUT	2	8	9564	3.8	361	2	9	10969	383	2	11627	411
		NEW YORK	571	1612	12057	3.6	430	14	8	13014	470	2	12794	464
		PENNSYLVANIA	4	10	13495	3.4	449	3	12	13017	466	1	13832	494
		MARYLAND	4	9	12537	3.8	470	1	10	11505	406	3	11958	418
		SOUTH CAROLINA	1	1	7880	3.0	238							
817054		NEW YORK	1	1	8210	3.6	297							
817076		NEW YORK	2	5	13639	3.5	471							
820752		VERMONT	6	14	11545	3.6	414							
		RHODE ISLAND	1	5	11184	3.4	380	1	6	12620	426	1	13941	504
		CONNECTICUT	1	5	10694	3.8	407	1	8	12920	465	2	12383	487

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERO			AV. FAT LB.
									NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	
			NEW YORK	398	1190	11250	3.7	410	1	17	13580	503	1	13069	455	
			PENNSYLVANIA	1	3	10343	4.0	409	1	4	14723	535	1	13701	493	
			MISSOURI	1	1	11460	3.4	385								
			MARYLAND	1	1	9370	3.9	364								
	822913		VERMONT	19	34	11443	3.6	410	1	88	12335	443	2	13734	484	
			MASSACHUSETTS	3	4	15287	3.5	530	2	20	13645	547	2	15178	575	
			RHODE ISLAND	1	6	14278	3.3	469	1	3	11708	407	2	11614	412	
			CONNECTICUT	3	6	11904	3.8	451	3	10	12332	467	1	12393	461	
			NEW YORK	645	1526	12591	3.6	457	137	15	12667	459	2	12656	459	
			NEW JERSEY	2	7	12126	3.9	470	1	23	12910	485				
			PENNSYLVANIA	6	12	11054	3.7	412	5	10	10540	382	2	11684	423	
			OHIO	1	3	13180	3.7	494	1	14	11910	421				
			KANSAS	1	5	13980	3.5	484								
			MARYLAND	1	9	11992	3.4	414								
			VIRGINIA	1	1	7710	4.2	325								
			SOUTH CAROLINA	1	1	9380	4.1	387								
	823593		NEW YORK	6	20	12311	3.6	436	1	1	12180	432	1	14944	521	
	826710		VERMONT	4	8	10342	3.9	402								
			MASSACHUSETTS	2	5	11495	3.6	413	1	62	11973	457				
			NEW YORK	343	946	11025	3.6	396	9	12	11601	428	2	12263	441	
			PENNSYLVANIA	5	11	11049	3.6	397	1	9	11126	409	3	11267	414	
			MARYLAND	1	3	11227	3.6	410	1	9	9463	393	1	9581	384	
	827226		VERMONT	1	2	10220	3.4	343								
			NEW YORK	33	91	12238	3.6	437	2	3	11937	430	2	12179	437	
			PENNSYLVANIA	1	1	12050	3.8	457	1	21	10870	382	1	10922	403	
	827743		VERMONT	2	8	9289	3.3	304	1	5	9538	373	3	8015	306	
			NEW YORK	80	199	10935	3.6	394	7	9	13300	489	2	12817	462	
			PENNSYLVANIA	1	1	15300	3.9	596	1	25	14820	609	1	15173	616	
	829220		VERMONT	15	33	11674	3.6	417	2	22	13685	490	1	12405	438	
			NEW YORK	338	683	12599	3.6	450	127	17	12683	460	1	12484	456	
			PENNSYLVANIA	2	4	11570	3.7	416	2	9	10972	395	2	8475	314	
			OHIO	1	6	12297	3.9	476	1	16	11873	420	5	11271	401	
			MARYLAND	1	1	17320	3.5	605	1	15	13620	503	1	14290	530	
	830269		NEW HAMPSHIRE	2	4	10060	3.7	364	2	11	11215	400	2	9772	345	
			VERMONT	33	83	11866	3.6	423	4	6	12535	449	2	11276	418	
			MASSACHUSETTS	1	6	14038	3.5	500	1	16	11655	432	5	12092	442	
			RHODE ISLAND	1	1	10520	3.3	348								
			NEW YORK	800	1920	11605	3.5	409	131	14	12349	449	2	12492	453	
			NEW JERSEY	1	1	10760	3.6	385								
			PENNSYLVANIA	6	12	11380	3.5	395	6	9	11097	398	2	11345	405	
			MICHIGAN	1	1	13270	3.5	462	1	5	12080	415				
			DELAWARE	1	2	14835	3.3	489					2	14884	539	
			MARYLAND	3	7	12039	3.4	414	1	4	9836	358	3	9908	368	
			VIRGINIA	1	3	13400	3.5	474								
			TEXAS	1	1	10860	3.4	374								
	830593		MAINE	1	1	6560	3.1	206								
			VERMONT	10	25	12686	3.5	443	1	29	14580	545	1	13135	498	
			MASSACHUSETTS	3	10	13278	3.3	442	3	16	11867	446	2	11991	432	
			CONNECTICUT	1	4	11740	3.4	403	1	9	12840	481	4	12900	472	
			NEW YORK	405	1031	11943	3.5	417	50	15	12614	457	2	12465	449	
			NEW JERSEY	2	3	8585	3.7	313								
			PENNSYLVANIA	2	4	12510	3.7	452	2	9	9205	328	1	10715	372	
			MARYLAND	1	5	12402	3.9	484	1	21	12160	418	2	11004	381	
			VIRGINIA	1	2	11910	3.1	370								
	831870		MAINE	1	2	13395	4.2	562	1	11	16540	609				
			NEW HAMPSHIRE	1	1	17980	3.5	633	1	16	11770	454	1	11990	463	
			VERMONT	91	201	12032	3.6	425	25	13	11940	446	2	11786	443	
			MASSACHUSETTS	1	1	13110	3.8	493	1	70	15540	585	1	14028	531	
			CONNECTICUT	5	16	15528	3.4	533	5	17	14089	512	2	14047	523	
			NEW YORK	1270	2439	12633	3.6	449	482	17	12717	460	2	12660	459	
			NEW JERSEY	2	3	15263	3.7	556	1	53	11550	429	1	11936	445	
			PENNSYLVANIA	19	38	12349	3.6	445	17	14	11889	444	2	12217	458	
			MARYLAND	3	3	10977	3.6	397	2	42	13210	501				
			VIRGINIA	1	2	16735	4.0	671	1	29	13740	528	1	13200	498	
			LOUISIANA	1	1	11670	4.0	464								
	832754		VERMONT	2	6	8293	3.6	293								
			NEW YORK	60	153	10416	3.8	390	2	14	12163	473	2	12070	456	
			NEW JERSEY	1	2	9755	3.8	374								
			OHIO	1	1	9980	3.1	310								
	834222		NEW HAMPSHIRE	1	1	9750	4.6	450								
			VERMONT	42	91	10819	3.6	385	2	3	11965	426	1	13418	462	
			MASSACHUSETTS	2	2	15100	3.5	527	1	26	12160	440	1	11500	420	
			NEW YORK	856	1882	10778	3.6	387	92	16	12530	449	2	12713	456	
			NEW JERSEY	4	8	11786	3.6	417								

TABLE 16.--DAUGHTER-AVLAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
								DAUS. NO.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		PENNSYLVANIA	4	14	13022	3.6	470	3	10	11915	414	4	10497	370
		MICHIGAN	1	1	8290	3.1	256	1	11	12020	425			
		MARYLAND	1	3	10710	3.9	418	1	16	11803	448	3	10104	369
		VIRGINIA	1	3	13997	4.0	565	1	4	15843	592	2	15222	585
		GEORGIA	1	1	13630	3.8	521	1	28	14630	537	1	13363	485
835302		CONNECTICUT	1	2	9400	3.6	340	1	2	10275	354	1	10900	404
		NEW YORK	2	2	13070	3.5	444							
		NEW JERSEY	375	1161	11316	3.7	413	26	19	13045	486	2	12498	472
		PENNSYLVANIA	5	13	11996	3.8	452	4	5	11770	473	1	10467	446
		MARYLAND	3	14	13019	3.6	461	2	5	10352	417	2	8333	347
835921		VERMONT	4	6	13015	3.6	468	2	9	12735	489	1	12688	475
		NEW YORK	93	160	13216	3.6	472	29	16	13182	472	2	12433	450
		PENNSYLVANIA	7	7	11693	3.4	396	7	12	11354	379	1	12801	430
836709		VERMONT	1	1	9500	3.6	337							
		CONNECTICUT	1	1	15940	3.3	528					1	15511	571
		NEW YORK	18	33	11829	3.7	438	2	18	15325	565	1	13135	487
837025		MAINE	1	1	11130	4.6	508	1	4	12310	428			
		VERMONT	112	174	11081	3.9	426	64	20	11837	438	1	11810	438
		MASSACHUSETTS	16	25	13048	3.9	507	16	77	13783	523	2	13637	517
		RHODE ISLAND	1	1	12050	4.6	554	1	9	11920	463	1	11401	440
		CONNECTICUT	11	24	13610	4.0	540	10	40	12716	480	2	12525	480
		NEW YORK	3333	5442	11996	3.8	458	2065	18	12705	461	1	12727	462
		NEW JERSEY	4	11	11112	4.1	456	1	11	13230	493	1	11532	437
		PENNSYLVANIA	41	64	11440	3.9	443	41	18	11471	422	2	11999	444
		INDIANA	2	4	10603	4.2	448	2	6	12093	441	2	11148	414
		NEBRASKA	1	2	7730	4.5	354	1	24	12690	468	2	11511	427
		KANSAS	3	4	12360	3.6	441							
		MARYLAND	7	7	12586	3.7	473	6	51	12850	479	1	12008	445
		VIRGINIA	4	4	13735	4.1	561	4	32	14993	558	1	13785	515
		WEST VIRGINIA	1	2	11905	4.6	536	1	22	13865	516	2	13849	521
		NORTH CAROLINA	3	6	8110	3.8	306	3	16	8014	301	2	10052	373
837589		VERMONT	20	56	10860	3.4	370	1	1	12160	490	2	10388	370
		CONNECTICUT	1	3	13633	3.3	444	1	5	12143	424	2	11435	396
		NEW YORK	278	636	12199	3.4	409	44	17	11910	430	2	12128	437
		NEW JERSEY	1	1	13170	3.3	436							
		MICHIGAN	1	1	12760	3.7	470							
		VIRGINIA	1	4	10358	3.1	323							
840142		NEW YORK	20	52	11829	3.6	434	1	6	15850	528	1	12393	437
846315		NEW YORK	41	105	10156	3.7	375	1	1	13322	534	1	10235	368
846425		NEW HAMPSHIRE	2	3	11220	3.7	418	2	13	12975	487	2	11235	434
		VERMONT	30	50	12349	3.7	457	16	14	12910	463	1	12652	461
		MASSACHUSETTS	4	6	14971	3.8	570	3	130	14950	583	2	14329	546
		NEW YORK	1197	2136	12994	3.6	468	704	20	12813	467	1	12812	465
		NEW JERSEY	2	2	9560	4.3	398	1	2	11840	504	1	11892	452
		PENNSYLVANIA	14	30	12657	3.6	456	13	18	11696	431	2	11875	434
		KANSAS	1	1	10340	3.6	371							
		MARYLAND	9	14	15474	3.9	602	9	37	13671	539	2	12387	475
		VIRGINIA	1	1	11710	3.6	416	1	1	9680	321	1	12143	417
		NORTH CAROLINA	1	3	11550	3.8	446	1	21	10870	424	2	12410	440
		GEORGIA	1	1	18850	3.3	615	1	2	12960	425			
847579		NEW HAMPSHIRE	1	2	9815	4.3	422	1	10	12770	437			
		VERMONT	112	203	10855	3.8	411	31	15	12353	453	1	11645	436
		MASSACHUSETTS	6	12	12696	3.8	486	4	41	12749	500	2	12586	512
		CONNECTICUT	9	23	15496	3.6	556	8	20	15159	550	1	13950	514
		NEW YORK	2957	5733	11795	3.7	439	1181	19	12624	459	1	12594	458
		NEW JERSEY	2	3	16473	4.0	653	2	22	15140	564	2	13963	519
		PENNSYLVANIA	32	64	11304	3.9	439	29	14	11449	426	2	12094	451
		MISSOURI	1	3	8103	4.0	319	1	13	10757	378	3	10275	360
		KANSAS	2	8	11138	4.1	455							
		DELAWARE	1	2	12655	3.8	480	1	14	13450	470	1	12154	449
		MARYLAND	18	30	12116	3.9	468	13	40	13893	550	3	11426	465
		VIRGINIA	5	6	12235	3.7	454	3	19	11580	436	1	11467	424
		SOUTH CAROLINA	1	1	10540	3.4	358							
		FLORIDA	1	5	12210	3.6	443	1	22	11695	423	2	9778	361
852208		NEW YORK	4	10	12644	3.3	416	1	98	9430	335	1	9123	316
853717		VERMONT	5	7	8381	3.7	315							
		CONNECTICUT	1	2	10725	3.9	423							
		NEW YORK	82	236	11447	3.8	437	7	19	11860	441	2	12873	467
855350		NEW YORK	11	45	12149	3.6	435	2	12	11855	428	1	11233	403
		MARYLAND	1	10	13647	3.4	462	1	11	11839	418	4	12058	422
855351		VERMONT	8	17	9235	3.6	327							
		MASSACHUSETTS	2	3	10183	3.4	346	1	3	10610	399			

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD NO.	MILK LB.	FAT LB.
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.			
		NEW YORK	600	1572	11646	3.5	408	75	12	12398	445	1	12339	445
		NEW JERSEY	1	3	14823	3.3	493							
		PENNSYLVANIA	4	6	12231	3.5	422	1	10	14590	520			
		MARYLAND	1	2	10385	3.4	347							
		VIRGINIA	1	1	11050	4.2	466							
	856728	NEW YORK	21	66	12401	3.6	437	1	4	9785	356	1	10889	387
		PENNSYLVANIA	1	1	13820	3.2	440							
	858418	NEW HAMPSHIRE	1	2	10340	3.6	364	1	14	11090	386	1	14148	500
		VERMONT	67	132	11606	3.7	420	20	20	12605	459	1	12719	459
		MASSACHUSETTS	6	10	13018	3.8	492	5	87	13866	522	2	13870	523
		NEW YORK	1402	2693	12040	3.6	437	628	19	12612	457	1	12542	454
		NEW JERSEY	6	8	11932	3.5	417	1	14	11590	428	1	11031	408
		PENNSYLVANIA	14	29	12074	3.8	455	14	20	11503	428	2	11748	437
		MARYLAND	2	10	16763	3.5	589	2	16	11815	417	3	11415	407
		VIRGINIA	1	1	17410	3.4	599	1	27	15590	574	1	13843	523
		NORTH CAROLINA	1	1	10960	3.5	385	1	5	10160	415	1	9679	332
		SOUTH CAROLINA	1	1	12040	3.4	407							
	858697	NEW YORK	6	22	9776	3.6	351	1	31	15600	597	1	16023	595
	859216	VERMONT	2	3	11180	3.8	424							
		NEW YORK	55	118	11086	3.7	407	2	14	14570	533	1	14780	549
	862248	VERMONT	23	47	12134	3.6	438							
		MASSACHUSETTS	3	10	14273	3.8	550	3	50	13388	501	3	12803	489
		CONNECTICUT	4	8	12232	3.6	442	4	29	10651	415	2	11820	455
		NEW YORK	734	1740	11980	3.6	425	178	13	12788	468	2	12598	459
		NEW JERSEY	4	4	11870	3.6	425	2	27	13785	513	1	12426	470
		PENNSYLVANIA	10	26	10819	3.5	386	10	15	11005	398	2	11154	410
		WISCONSIN	1	1	13490	3.4	458							
		KANSAS	2	6	11857	3.9	458	1	31	14230	510	1	11827	447
		MARYLAND	1	1	10850	3.6	387							
		VIRGINIA	1	2	12025	3.5	411	1	5	9715	325	2	10666	383
		WEST VIRGINIA	1	3	8337	3.4	280							
		NORTH CAROLINA	2	2	8260	3.6	296	2	6	8295	345	1	9222	391
		GEORGIA	1	2	12395	3.2	399	1	4	11170	388	1	10377	386
	863756	NEW HAMPSHIRE	1	1	13910	4.1	567	1	8	14690	533			
		VERMONT	4	8	10641	3.8	397	3	17	11353	403	2	11181	429
		MASSACHUSETTS	1	2	15685	4.2	654	1	99	15225	575	2	14290	544
		CONNECTICUT	3	6	14119	3.7	528	3	13	12045	469	2	13160	506
		NEW YORK	213	407	12121	3.7	447	92	15	12458	454	1	12328	450
		PENNSYLVANIA	66	159	11424	3.7	420	64	15	11244	413	2	11346	419
		FLORIDA	1	1	17230	3.7	639	1	16	10610	442	1	12491	542
	866142	NEW YORK	6	14	11097	3.7	408	2	17	13973	475	2	12372	429
	870458	VERMONT	1	4	11873	4.0	469							
		CONNECTICUT	1	7	14081	3.8	524	1	40	13596	550	5	13789	554
		NEW YORK	88	248	10844	3.6	388	5	7	12132	427	2	12254	440
		PENNSYLVANIA	1	6	14337	3.4	480	1	15	12042	455	4	12968	485
	877490	NEW YORK	10	28	11494	3.6	412	1	1	11785	416	1	11565	423
	878378	NEW YORK	14	32	9636	3.6	353	1	17	11480	416	2	11173	407
	880178	VERMONT	1	2	8500	3.4	285							
		MASSACHUSETTS	1	3	10110	3.6	365	1	19	10167	417	2	9243	392
		NEW YORK	61	154	11584	3.6	410	7	13	11680	429	2	11898	426
	883725	NEW HAMPSHIRE	1	3	10920	3.5	379	1	7	10157	362			
		VERMONT	12	27	10810	3.4	368	1	8	11500	410	1	11478	403
		MASSACHUSETTS	2	5	12001	3.5	416	2	14	11284	425	3	13041	407
		NEW YORK	340	799	11387	3.5	395	64	13	12740	457	2	12333	445
		PENNSYLVANIA	4	10	12514	3.3	405	4	12	10347	391	1	12833	477
		MICHIGAN	1	5	10760	3.8	407	1	6	10990	391			
		KANSAS	1	2	11635	4.1	479							
		MARYLAND	1	1	14750	3.9	574	1	14	12840	496			
	884285	VERMONT	6	13	11176	3.7	421	1	25	13390	467	1	13603	484
		NEW YORK	71	148	12260	3.8	463	13	17	12847	480	2	13258	487
		NEW JERSEY	1	1	14380	3.7	527							
	888602	VERMONT	8	15	10727	3.7	396	3	31	13287	482	2	13006	482
		CONNECTICUT	1	2	13815	3.5	488	1	22	13635	505	2	13505	499
		NEW YORK	120	264	12159	3.5	428	31	17	12886	470	2	13048	478
		VIRGINIA	1	1	10610	3.6	383	1	21	10540	385	1	9875	372
	889312	VERMONT	48	74	10168	3.7	366	5	20	12322	451	1	12477	465
		MASSACHUSETTS	4	8	11976	3.8	449	3	15	12324	474	2	12331	466
		RHODE ISLAND	1	6	13268	3.7	489	1	4	12810	472	6	12833	473
		CONNECTICUT	3	5	13164	3.7	477	3	20	16408	549	1	15636	544
		NEW YORK	1582	3036	11089	3.6	399	319	15	12665	460	2	12629	460

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK			TEST			305-DAY CONTEMPORARY AV.				YEARLY HERD		
					LBS.			PCT.			DAUS.	NO.	LBS.		NO.	LBS.	
		NEW JERSEY	1	1	8790	3.6	318				1	15	11640	436	1	11532	437
		PENNSYLVANIA	14	29	11027	3.8	421				14	18	11998	439	2	12226	446
		MICHIGAN	1	1	13200	3.6	477				1	3	11840	456	1	10791	439
		WISCONSIN	1	1	11640	3.3	387				1	9	10090	361			
		MARYLAND	5	11	9399	3.6	345				4	12	10944	397	1	10066	378
		VIRGINIA	3	6	9701	3.6	349										
		TENNESSEE	2	2	11400	3.6	408										
891636		NEW HAMPSHIRE	1	2	8770	3.8	327				1	10	10925	377	1	14148	500
		VERMONT	46	90	11198	3.6	402				8	22	12344	440	2	12192	439
		MASSACHUSETTS	4	8	13239	3.8	510				4	51	13478	509	2	12035	459
		CONNECTICUT	3	9	14930	3.8	567				3	30	13589	505	4	13837	533
		NEW YORK	1258	2757	11878	3.6	424				270	15	12774	463	2	12711	460
		NEW JERSEY	4	10	10253	3.8	391				2	20	13013	487	2	13233	500
		PENNSYLVANIA	7	13	14028	3.7	520				6	10	12955	482	1	12983	475
		MARYLAND	5	15	10530	3.4	357				4	29	11217	395	2	10924	392
		VIRGINIA	3	8	14267	3.4	496				2	6	12719	494	2	13238	494
		WEST VIRGINIA	1	3	15027	3.8	566										
901445		VERMONT	58	110	11258	3.7	409				20	10	12760	469	1	11637	441
		MASSACHUSETTS	6	12	14235	3.6	512				5	54	13088	508	2	13332	513
		CONNECTICUT	4	5	13490	3.7	498				4	13	13775	499	1	13076	472
		NEW YORK	1213	2421	11784	3.6	421				457	19	12671	459	1	12696	459
		NEW JERSEY	3	6	12489	3.7	459										
		PENNSYLVANIA	19	30	10655	3.7	391				18	18	11043	410	2	11491	427
		MARYLAND	2	7	8167	3.4	282				1	6	5715	205	1	8807	324
902501		VERMONT	9	19	11117	3.6	398				1	29	13990	496	1	13898	501
		NEW YORK	305	613	12040	3.6	432				93	15	12678	454	2	12753	459
		NEW JERSEY	1	1	13480	3.4	458				1	5	12790	482	1	13309	530
		PENNSYLVANIA	3	8	10833	3.2	343				2	8	10942	406	5	9313	345
902915		MAINE	1	1	7660	4.0	307				1	9	13310	515	1	9821	382
		NEW HAMPSHIRE	1	2	13000	3.7	481				1	24	14805	572	2	9630	508
		VERMONT	49	80	10731	3.8	402				7	20	12644	451	2	12308	442
		MASSACHUSETTS	3	5	10525	3.9	405				3	51	13985	558	2	13854	532
		RHODE ISLAND	2	9	13234	3.9	513				2	6	13901	508	5	13141	487
		CONNECTICUT	5	11	13174	3.7	488				4	31	13394	512	2	13079	505
		NEW YORK	1332	2225	11500	3.7	427				486	18	12623	457	2	12494	454
		NEW JERSEY	5	8	12453	3.6	447				4	20	11588	432	2	12234	448
		PENNSYLVANIA	9	14	10181	3.8	386				7	17	11921	446	2	12127	448
		INDIANA	1	1	11900	3.4	401				1	8	13770	522	1	11925	456
		ILLINOIS	1	1	8890	3.8	337										
		MICHIGAN	1	1	9060	3.4	306				1	5	11280	393	1	10028	331
		DELAWARE	2	6	15596	3.8	579				2	23	14092	537	3	13009	506
		MARYLAND	7	10	9607	3.7	354				7	23	11385	422	1	10293	382
903537		VERMONT	16	26	11515	3.4	393				7	20	11831	430	1	12115	445
		MASSACHUSETTS	2	3	11160	3.8	429				2	140	13325	522	2	12988	503
		CONNECTICUT	1	4	14650	3.8	558				1	8	13958	505	1	12808	485
		NEW YORK	308	476	12649	3.4	431				155	20	12982	466	1	13019	469
		NEW JERSEY	1	1	18430	3.0	560				1	14	15490	581	1	13015	471
		PENNSYLVANIA	5	6	13883	3.4	468				5	20	12313	452	1	12164	455
904891		VERMONT	28	57	10827	3.6	387				5	15	13997	513	2	13415	495
		MASSACHUSETTS	2	6	12078	3.7	437				2	78	12090	481	3	12523	480
		CONNECTICUT	2	4	11370	3.6	406				1	5	12160	428			
		NEW YORK	758	1471	11551	3.6	410				237	15	12814	465	2	12612	459
		NEW JERSEY	1	1	13370	3.2	423										
		PENNSYLVANIA	2	5	12069	3.4	412				2	13	12381	442	2	11571	422
		MARYLAND	1	2	7935	3.5	274										
		NORTH CAROLINA	1	1	13810	3.3	462				1	28	11650	411	1	11663	422
905683		VERMONT	42	55	11393	3.8	429				30	21	12321	449	1	12238	450
		MASSACHUSETTS	8	14	14954	4.0	590				8	108	14555	556	2	14114	541
		RHODE ISLAND	2	5	12974	3.7	482				2	34	13113	486	2	13391	491
		CONNECTICUT	6	10	14311	3.8	542				6	26	14699	555	2	14488	546
		NEW YORK	1488	2081	12483	3.7	465				1064	19	12781	465	1	12908	468
		NEW JERSEY	1	2	13865	3.9	533				1	13	13355	499	2	13358	511
		PENNSYLVANIA	22	31	11979	3.8	457				21	17	11250	417	2	12275	453
		MISSOURI	1	3	6910	4.1	281				1	26	8955	447	2	9058	360
		DELAWARE	1	1	16180	3.4	557				1	11	12650	451	1	13581	492
		MARYLAND	1	1	12640	3.9	498				1	5	9190	308	1	9854	377
		VIRGINIA	3	4	13955	3.8	523				3	25	12755	500	1	12739	497
		NORTH CAROLINA	1	2	12985	3.9	500				1	7	11275	451	1	13342	497
		GEORGIA	1	3	10203	4.0	414				1	8	12017	437	2	10661	404
		FLORIDA	1	2	7940	3.6	286				1	46	9015	354	1	8077	331
		TENNESSEE	1	1	10690	3.9	415										
924564		NEW HAMPSHIRE	1	1	13250	3.5	463										
		VERMONT	75	155	11550	3.6	419				22	14	12535	463	2	12433	457
		MASSACHUSETTS	6	10	15765	3.7	585				6	67	12745	498	2	12899	506
		CONNECTICUT	4	9	13201	3.7	487				4	14	12456	460	2	12575	460
		NEW YORK	1449	2777	12317	3.6	444				529	19	12753	461	2	12572	454
		NEW JERSEY	3	7	13603	4.1	546				1	24	12130	446	2	11925	444

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		PENNSYLVANIA	9	20	13437	3.7	497							
		MICHIGAN	1	1	6680	4.2	284							
		MARYLAND	2	4	7312	3.9	281							
		VIRGINIA	1	2	19230	3.5	663							
		FLORIDA	1	1	7950	3.3	260							
		CALIFORNIA	1	1	14600	3.4	503							
	926100	NEW YORK	32	81	10629	3.7	369	1	1	11620	402			
	926102	VERMONT	4	8	10693	3.8	402							
		NEW YORK	115	303	10995	3.6	392	16	19	12066	425	2	11895	423
		PENNSYLVANIA	1	3	11773	3.6	422							
	929962	VERMONT	63	116	12291	3.6	444	37	17	12211	448	2	12192	449
		MASSACHUSETTS	13	15	15063	3.7	556	13	108	14513	548	1	13892	527
		CONNECTICUT	5	10	13615	3.8	528	5	15	12294	472	2	12756	491
		NEW YORK	2135	3500	12888	3.6	465	1417	19	12782	465	1	12799	465
		NEW JERSEY	5	12	11993	3.5	431	3	29	12717	486	2	11748	433
		PENNSYLVANIA	28	40	13030	3.7	478	25	20	12120	452	1	12650	473
		MINNESOTA	8	12	15778	3.7	587	7	8	13638	548	2	12643	494
		MARYLAND	7	12	14045	3.6	503	7	29	13214	512	2	12407	467
		VIRGINIA	1	1	6450	3.6	231	1	26	10750	399	1	10399	375
		WEST VIRGINIA	2	2	15655	3.7	583	2	51	11850	463	1	12328	470
		SOUTH CAROLINA	1	1	13040	4.2	554							
	936716	NEW HAMPSHIRE	2	4	10644	3.3	350	2	6	12227	443	1	13058	479
		VERMONT	24	42	10174	3.5	353					1	14028	509
		MASSACHUSETTS	3	9	10911	3.7	400	2	3	11815	386			
		CONNECTICUT	5	15	13212	3.5	454	3	7	11648	443	3	10008	408
		NEW YORK	920	2151	11070	3.5	387	41	13	12420	456	2	12072	444
		NEW JERSEY	5	12	10256	3.4	343							
		PENNSYLVANIA	7	19	12250	3.4	416	4	9	12622	457	2	11417	416
		OHIO	1	2	11920	3.7	432	1	6	9890	362	2	10132	376
		INDIANA	1	2	12825	3.5	445	1	3	16690	627	1	15195	574
		WISCONSIN	1	1	9120	3.6	326							
		KANSAS	7	15	11789	3.8	441	1	33	12490	463	1	10595	395
		MARYLAND	7	19	9696	3.6	345	4	18	10332	401	1	11669	446
		VIRGINIA	3	8	9673	3.7	357	2	6	11610	418	2	10473	385
		WEST VIRGINIA	1	2	9295	3.2	299							
		ARIZONA	1	1	9550	2.6	245	1	7	14830	485			
	938034	VERMONT	24	31	11086	3.6	401	16	23	12893	476	1	12917	474
		MASSACHUSETTS	1	2	13575	3.5	466	1	94	15575	609	2	14410	551
		CONNECTICUT	2	2	14030	3.8	530	2	27	14300	572	1	13876	543
		NEW YORK	540	736	11955	3.6	431	377	19	12831	466	1	12779	464
		NEW JERSEY	2	4	13125	3.7	478							
		PENNSYLVANIA	13	24	11445	3.6	411	12	17	12131	449	2	12258	454
		VIRGINIA	2	3	13560	3.9	522	1	14	14750	567	1	14868	552
		SOUTH CAROLINA	1	2	18860	3.2	592	1	20	14965	523	1	15870	543
	938082	VERMONT	12	14	10735	3.7	400	9	21	12458	462	1	12307	451
		MASSACHUSETTS	1	1	13460	4.0	534	1	147	15550	590	1	14737	558
		RHODE ISLAND	1	1	10760	3.9	424	1	20	11780	411	1	12927	472
		CONNECTICUT	2	3	12163	4.1	496	2	7	13785	503	2	13620	503
		NEW YORK	359	557	11286	3.8	431	216	19	12302	447	1	12305	447
		PENNSYLVANIA	4	6	9736	3.7	353	4	16	9868	354	2	10128	374
		LOUISIANA	1	1	9960	3.9	392							
	940424	VERMONT	7	12	12530	3.6	450	4	15	14303	509	2	12840	460
		NEW YORK	138	249	12910	3.4	439	53	17	12469	453	1	12110	442
		PENNSYLVANIA	4	10	9748	3.4	338	3	20	12258	454	3	12485	460
		OHIO	1	1	11030	3.2	351	1	4	10960	419	1	8938	317
	941780	VERMONT	83	163	11306	3.6	407	13	18	12261	454	2	12978	478
		MASSACHUSETTS	4	5	11519	3.6	414	4	20	11736	441	1	12626	474
		CONNECTICUT	8	16	12388	3.7	453	6	17	13206	491	3	13539	512
		NEW YORK	2109	4363	11662	3.6	417	470	17	12485	452	2	12447	452
		NEW JERSEY	3	5	11595	3.7	419	2	16	11283	402	2	11881	441
		PENNSYLVANIA	11	20	10478	3.6	375	11	18	10813	388	2	11599	424
		WISCONSIN	2	2	12220	3.4	415	1	18	12310	459	1	12197	483
		MARYLAND	8	17	11795	3.6	420	7	24	13074	504	3	11382	428
		VIRGINIA	2	4	10414	3.3	339	1	32	12090	459	1	12917	494
		NORTH CAROLINA	3	3	12693	3.8	484	2	8	11400	414	1	16753	593
		SOUTH CAROLINA	1	2	8945	3.7	329							
		GEORGIA	1	2	13875	3.6	496	1	13	12160	437	1	9941	392
		FLORIDA	1	2	11245	3.4	376	1	8	9010	334	2	9123	358
	951058	MASSACHUSETTS	1	1	14600	3.4	494	1	5	12940	497	1	12938	507
		CONNECTICUT	1	2	12735	3.7	462	1	18	10845	405	2	10644	393
		NEW YORK	159	272	13462	3.6	484	61	20	13330	489	2	13128	481
		PENNSYLVANIA	3	4	13808	3.8	518	2	18	12018	480	2	12355	467
		MARYLAND	2	2	14675	3.6	533	1	36	11040	402	1	12339	472
		SOUTH CAROLINA	1	1	5620	3.3	186	1	11	5540	224	1	4796	193
		TENNESSEE	1	1	12830	3.5	444							

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY NO. NO.	AV. MILK LB.	FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
	952421	MAINE	1	1	14800	3.5	514							
		VERMONT	44	56	11162	3.8	416	19	17	12273	453	1	11736	437
		MASSACHUSETTS	3	3	15933	3.7	591	3	119	15233	574	1	14174	541
		CONNECTICUT	2	2	14105	3.9	551	2	15	15055	553	1	14301	524
		NEW YORK	1091	1598	11568	3.7	431	585	18	12483	453	1	12472	453
		NEW JERSEY	2	3	6233	3.6	224	1	61	10750	403	1	9418	393
		PENNSYLVANIA	125	273	11142	3.7	413	100	13	11015	408	2	11191	414
		OHIO	1	1	10890	3.8	410							
		MARYLAND	3	4	10192	3.5	358	3	14	8460	356	2	9543	420
		VIRGINIA	2	3	8763	3.9	344							
		NORTH CAROLINA	1	2	8520	3.8	318	1	21	10270	375			
		SOUTH CAROLINA	1	1	8590	3.3	284	1	30	12990	455			
	954645	VERMONT	2	4	9067	3.8	342	1	12	10987	401	3	11158	398
		NEW YDRC	40	58	11389	3.8	426	22	18	12566	455	1	12275	446
		PENNSYLVANIA	2	4	8794	3.6	316	2	16	9625	323	2	9349	321
		MARYLAND	1	2	11485	3.9	447	1	47	11420	428	2	13980	506
	955619	VERMONT	29	46	13572	3.7	495	14	21	13823	504	1	13254	480
		MASSACHUSETTS	2	3	15505	3.7	561	2	82	13513	507	2	13081	490
		CONNECTICUT	3	5	11707	3.8	450	3	32	13887	526	2	13227	504
		NEW YORK	1025	1766	12770	3.7	469	490	17	12992	473	2	12916	470
		NEW JERSEY	5	7	14803	3.8	569	4	14	13038	481	2	12350	458
		PENNSYLVANIA	13	21	12236	3.6	436	12	15	11609	432	2	11540	426
		DELAWARE	1	2	16760	3.6	607	1	15	14525	526	2	14819	537
		MARYLAND	2	5	12887	3.7	481	2	28	11927	456	2	12279	468
		VIRGINIA	2	2	12970	4.4	566	1	19	13710	542			
		NORTH CAROLINA	2	3	9983	3.8	382					1	6736	255
	956081	VERMONT	77	117	12391	3.7	457	52	18	12406	452	1	12348	452
		MASSACHUSETTS	8	13	16798	3.8	631	8	84	14453	554	2	13937	532
		RHODE ISLAND	2	2	12620	4.3	535	2	8	11095	440	1	11821	456
		CONNECTICUT	7	13	11602	3.7	431	7	10	12886	488	2	13515	503
		NEW YORK	2253	3319	13098	3.6	475	1675	19	12870	469	1	13005	473
		NEW JERSEY	3	6	12923	3.8	493	3	4	12600	499	2	13059	493
		PENNSYLVANIA	30	37	12275	3.6	441	30	18	11617	431	1	12218	453
		MARYLAND	17	22	14866	3.9	583	17	48	14198	558	1	13123	520
		VIRGINIA	4	5	12870	3.8	492	2	24	13420	501	1	12857	480
		WEST VIRGINIA	1	1	13010	3.4	441	1	37	11030	405	1	9025	336
		NORTH CAROLINA	1	1	16100	3.2	518	1	25	12640	443	1	13963	505
	963422	VERMONT	14	26	11173	3.5	387	9	12	12393	450	2	12300	445
		MASSACHUSETTS	3	4	15447	3.7	577	3	52	13697	510	1	13591	504
		CONNECTICUT	1	1	15960	3.5	559	1	15	15540	553	1	15794	562
		NEW YORK	769	1188	12904	3.6	461	510	20	12746	464	1	12813	466
		NEW JERSEY	1	2	18190	3.5	633	1	10	12835	480	2	12557	467
		PENNSYLVANIA	6	10	12018	3.7	447	6	18	11743	426	1	11913	440
		VIRGINIA	1	1	12470	4.3	538	1	34	13900	541	1	13200	498
	963947	VERMONT	9	12	12999	3.8	492	6	12	12698	478	2	12046	438
		MASSACHUSETTS	2	2	10850	3.8	407	2	9	12250	439	1	11788	432
		NEW YORK	270	371	12161	3.7	445	170	19	12726	463	1	12703	460
		PENNSYLVANIA	2	5	9981	3.7	358	2	17	9315	336	2	10899	401
	964599	VERMONT	22	27	11843	3.5	411	7	8	12099	442	2	12583	455
		MASSACHUSETTS	1	2	15440	3.0	456	1	10	13490	523	1	14628	552
		RHODE ISLAND	1	1	12400	3.6	450	1	21	11100	422	1	11859	439
		CONNECTICUT	1	2	15870	3.5	555	1	6	17330	654	2	15882	585
		NEW YORK	478	773	12285	3.5	422	202	19	13017	467	2	12740	461
		PENNSYLVANIA	6	14	11863	3.5	408	6	13	12617	462	3	12493	449
		VIRGINIA	2	2	14590	3.6	528	2	40	15095	558	1	15353	562
	966470	VERMONT	13	20	11617	3.7	422	4	11	12986	505	2	12404	465
		MASSACHUSETTS	1	1	14630	4.1	597	1	147	14180	558	1	13974	534
		CONNECTICUT	2	4	15289	3.8	576	2	16	15859	566	2	15614	575
		NEW YORK	384	654	12943	3.6	469	174	15	12746	461	2	12444	453
		NEW JERSEY	1	2	12895	3.7	476							
		PENNSYLVANIA	4	7	11452	3.6	414	3	9	9306	342	2	11835	429
		MICHIGAN	1	1	11210	3.4	385	1	10	12310	468	1	15674	530
		VIRGINIA	2	6	11550	3.6	415							
		NORTH CAROLINA	1	1	14650	3.2	474							
	966610	CONNECTICUT	1	1	14760	3.7	542							
		NEW YORK	55	142	10924	3.4	368	2	11	11339	397	2	11356	412
		PENNSYLVANIA	1	2	10910	3.2	348	1	8	13925	513			
	968796	CONNECTICUT	1	1	7510	3.6	271	1	24	9250	337	1	9788	361
		NEW YORK	10	20	12842	3.6	459	7	30	12588	444	2	12750	456
		WISCONSIN	1	1	12600	4.2	523	1	3	16680	609	1	14933	548
	969898	NEW YORK	34	80	10196	3.6	370	1	15	15050	548	2	14704	542
	974774	VERMONT	11	13	12552	3.7	469	9	15	12387	450	1	11149	428
		MASSACHUSETTS	2	3	14920	3.7	547	2	77	12193	484	1	14258	544
		CONNECTICUT	2	4	14445	3.7	520	1	10	15973	581	3	15460	568

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECOROS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		NEW YORK	475	630	12240	3.7	446	408	19	12589	458	1	12740	462
		PENNSYLVANIA	11	13	11320	3.7	424	10	17	11309	417	1	11835	440
		MARYLAND	2	3	10800	4.2	453	2	14	10265	404	2	10402	408
		VIRGINIA	2	2	15230	3.6	551	1	29	14390	556	1	13200	498
	987080	VERMONT	4	7	10058	3.7	365	1	14	12890	451	2	13042	466
		NEW YORK	14	29	11829	3.6	417					1	10006	366
	987081	MASSACHUSETTS	1	3	14563	3.4	489	1	13	13517	482	1	13669	494
		NEW YORK	21	60	13092	3.4	444	2	3	16064	569	2	13636	483
	995619	VERMONT	16	26	11325	3.6	406	9	22	12998	475	2	12935	467
		MASSACHUSETTS	2	2	11865	3.8	443	2	63	13225	504	1	13282	504
		CONNECTICUT	2	6	12686	3.5	439	2	17	13262	488	3	12777	462
		NEW YORK	317	469	12101	3.5	427	203	17	12635	461	1	12637	458
		PENNSYLVANIA	3	9	11801	3.4	397	3	23	11470	422	3	11525	419
		VIRGINIA	1	1	10010	3.5	347	1	11	11380	442	1	12546	486
	1006864	VERMONT	13	19	12302	3.8	470	10	24	12606	479	1	12498	476
		MASSACHUSETTS	2	2	10935	4.1	453	2	123	14800	572	1	14219	545
		NEW YORK	371	573	12092	3.8	455	264	19	12495	454	1	12514	454
		NEW JERSEY	1	2	16765	3.8	636	1	21	14700	543	2	12295	458
		PENNSYLVANIA	7	9	11989	3.8	446	7	13	10921	411	1	11049	422
		MARYLAND	1	1	14570	4.1	591	1	9	12210	485	1	13571	585
	1007194	VERMONT	21	26	10859	3.6	391	16	19	10924	402	1	11479	421
		MASSACHUSETTS	4	5	13718	3.8	527	4	32	12301	468	1	13314	518
		RHODE ISLAND	2	2	10640	3.7	390	2	5	11735	443	1	12241	472
		CONNECTICUT	1	1	10790	4.1	446	1	90	10320	399	1	8164	329
		NEW YORK	842	1129	11799	3.8	443	749	21	12732	464	1	12845	468
		NEW JERSEY	1	1	12850	3.9	503	1	9	12020	440	1	12491	467
		PENNSYLVANIA	18	23	11875	3.8	444	18	17	11553	433	1	12975	480
		NORTH CAROLINA	1	1	11010	3.8	420	1	21	10190	372			
	1010205	VERMONT	2	5	10887	3.6	393							
		NEW YORK	55	150	10715	3.7	391	6	18	12561	453	2	12330	441
		TENNESSEE	2	3	10915	3.6	390							
	1013036	VERMONT	4	4	11325	3.5	389	3	20	10740	393	1	13064	478
		NEW YORK	179	217	12449	3.7	457	172	21	12830	467	1	12980	473
		PENNSYLVANIA	6	7	12132	3.8	455	6	21	11458	431	1	12820	482
		VIRGINIA	1	1	15950	3.4	544	1	15	13200	486	1	13189	483
	1013760	VERMONT	8	10	11816	3.5	419	5	12	12751	458	2	11676	418
		MASSACHUSETTS	3	3	14907	3.7	541	3	52	13033	473	1	12902	481
		CONNECTICUT	1	2	14550	2.7	391	1	22	10760	377	2	11630	420
		NEW YORK	319	435	11590	3.6	412	228	20	12566	457	1	12639	459
		PENNSYLVANIA	4	10	12843	3.7	464	4	21	11843	440	2	12819	466
		VIRGINIA	1	1	10000	3.4	343	1	17	9700	355	1	10137	367
	1025205	NEW YORK	35	88	11037	3.6	397	5	15	11902	440	2	11871	429
		PENNSYLVANIA	1	4	11483	3.6	403	1	12	12015	435	2	11483	423
		TENNESSEE	4	12	11191	3.5	391							
	1028123	VERMONT	65	84	12180	3.7	449	57	20	11907	438	1	12025	445
		MASSACHUSETTS	4	6	14498	3.7	527	4	89	14914	565	1	14448	550
		RHODE ISLAND	1	1	13040	3.4	449	1	14	10420	398	1	11761	436
		CONNECTICUT	3	3	14137	3.8	531	3	73	12197	468	1	12615	489
		NEW YORK	1216	1566	12463	3.7	456	1114	20	12646	459	1	12824	465
		NEW JERSEY	6	7	12176	3.8	466	5	15	12020	449	1	11971	450
		PENNSYLVANIA	25	32	12457	3.8	470	24	22	11848	438	1	12377	457
		MARYLAND	1	2	11340	3.5	399	1	138	12150	492	1	11074	447
		VIRGINIA	3	3	13173	3.7	488	3	35	10427	385	1	12148	451
		TENNESSEE	3	4	13070	3.4	432							
	1033024	VERMONT	10	11	11359	3.7	410	10	24	11457	445	1	12488	461
		RHODE ISLAND	1	1	14120	3.5	501	1	8	12180	474			
		CONNECTICUT	1	1	16050	3.2	520	1	19	14210	530	1	14181	531
		NEW YORK	218	256	12330	3.6	442	206	21	12475	452	1	12660	457
		PENNSYLVANIA	6	9	11805	3.7	440	6	17	11618	428	2	12678	464
	1034466	VERMONT	6	11	11525	3.9	443							
		MASSACHUSETTS	1	2	11925	3.7	442	1	7	11355	438	2	11353	431
		CONNECTICUT	1	3	10687	3.8	410	1	5	11150	429	1	10290	392
		NEW YORK	119	191	11734	3.7	437	43	14	12570	459	1	12191	444
		PENNSYLVANIA	32	52	10425	3.7	388	32	14	11423	430	2	11192	416
	1034467	VERMONT	5	5	11824	3.5	423	5	26	11320	401	1	11500	408
		MASSACHUSETTS	5	5	13730	4.1	554	5	116	14668	581	1	14426	550
		RHODE ISLAND	1	1	17130	3.6	615	1	8	11800	460			
		CONNECTICUT	2	2	15105	3.7	560	2	49	14645	560	1	14563	562
		NEW YORK	303	365	12284	3.6	444	293	21	12883	468	1	12990	471
		PENNSYLVANIA	4	6	11454	3.7	422	4	27	11590	429	2	12366	462

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPDRAV. NO.	MILK LB.	AV. FAT LB.	YEARLY HERD NO.	MILK LB.	AV. FAT LB.
	1049547	VERMONT	20	21	12539	3.7	459	20	29	12148	449	1	12533	463
		MASSACHUSETTS	2	2	15885	3.7	581	2	145	14380	554	1	13974	534
		RHODE ISLAND	2	2	14105	3.6	506	2	14	11385	442	1	11859	439
		NEW YORK	606	725	13747	3.6	487	597	20	12826	467	1	13021	472
		NEW JERSEY	1	1	14010	3.5	493	1	7	15740	589			
		PENNSYLVANIA	11	13	13535	3.5	475	11	13	12410	459	1	13108	483
		VIRGINIA	1	1	15740	3.2	503	1	15	13210	489			
		GEORGIA	1	2	12590	3.0	383	1	22	13640	483	1	13625	480
	1052808	VERMONT	6	7	12094	3.8	452	6	19	11941	436	1	11912	449
		NEW YORK	144	195	13135	3.9	514	138	20	12835	467	1	12974	472
		NORTH CAROLINA	1	1	9760	3.9	380	1	13	11750	414	1	11500	416
	1068501	VERMONT	3	4	11888	3.8	446	1	3	11390	420	1	12938	468
		CONNECTICUT	2	2	13905	3.8	535	1	25	10610	379			
		NEW YDRK	209	286	11919	3.6	426	161	19	12586	458	1	12707	461
		PENNSYLVANIA	3	7	13573	3.6	495	3	15	11204	397	3	10545	375
	1074357	VERMONT	3	6	9839	3.6	358							
		CONNECTICUT	1	4	12250	4.2	512	1	8	12548	478	4	12195	467
		NEW YORK	46	100	11663	3.6	419	6	5	12230	460	2	11280	407
	1085978	VERMONT	7	7	14640	3.9	565	7	11	13009	489	1	14265	541
		MASSACHUSETTS	4	4	15333	3.5	531	4	72	14598	566	1	14130	536
		RHODE ISLAND	1	1	13520	3.6	485	1	14	10380	396	1	11761	436
		CONNECTICUT	2	3	15278	4.1	599	2	20	13908	520	2	13683	520
		NEW YDRK	479	564	14030	3.6	504	417	19	12994	474	1	13444	489
		NEW JERSEY	1	4	14538	3.6	522							
		PENNSYLVANIA	8	8	12999	3.8	491	8	16	12464	478	1	13088	508
		VIRGINIA	1	1	10760	3.4	361	1	1	9810	408	1	14203	558
		NORTH CAROLINA	1	1	5840	3.9	229	1	46	8800	315	1	9123	329
		SOUTH CAROLINA	1	1	13630	3.5	476	1	22	13160	461			
	1090666	VERMONT	1	1	10180	3.5	354							
		NEW YORK	19	33	12133	3.7	440	4	13	14849	517	1	13757	502
	1094074	NEW YORK	3	3	4550	3.6	161	1	1	4000	140	1	12633	446
		PENNSYLVANIA	1	1	6540	3.5	227	1	4	7660	309	1	17048	681
	1096634	VERMONT	1	3	11130	3.9	436							
		NEW YDRK	34	61	11705	3.7	430	8	18	12712	456	2	12612	445
		SOUTH CAROLINA	1	1	8330	3.2	264							
	1105728	VERMONT	1	1	11700	4.4	513	1	19	12450	469	1	10987	427
		NEW YDRK	20	20	13354	3.6	483	20	20	12794	464	1	13422	488
		PENNSYLVANIA	1	1	11600	4.1	476	1	14	12760	469	1	12960	496
	1113559	VERMONT	3	5	9642	3.6	346							
		NEW YDRK	44	79	10675	3.7	392	13	17	12052	441	2	11768	422
		OHIO	1	1	9050	4.0	363	1	19	11620	418	1	11118	399
	1113862	VERMONT	2	2	9400	3.9	364							
		NEW YDRK	27	51	12042	3.7	450	8	15	13854	511	2	13188	491
		MICHIGAN	1	1	10300	3.7	385	1	5	12310	469	1	11848	461
		MARYLAND	1	1	16070	4.4	702	1	19	12100	476	1	12709	501
	1115014	VERMONT	8	9	12688	3.7	461	6	20	11627	428	1	11774	432
		CONNECTICUT	1	1	11660	3.4	400	1	19	14440	537	1	13418	513
		NEW YDRK	222	297	12638	3.6	460	184	22	12688	463	1	13003	473
		NEW JERSEY	1	1	10330	3.9	399	1	33	12980	479	1	12175	457
		PENNSYLVANIA	4	4	12628	3.7	467	4	22	12378	461	1	12263	453
	1127372	VERMONT	4	6	11000	3.7	397							
		NEW YDRK	40	62	11654	3.8	438	20	13	13014	475	2	12140	445
	1134953	VERMONT	1	1	9310	3.9	364							
		NEW YORK	97	139	12225	3.7	445	47	17	12104	441	1	12134	449
		PENNSYLVANIA	1	1	10240	3.8	438	1	21	10960	385	1	11685	437
		MICHIGAN	1	1	13540	4.0	543	1	4	12580	439	1	11347	409
	1138655	VERMONT	1	1	14350	3.5	497							
		NEW YORK	31	40	11204	3.6	395	11	17	12363	448	1	12264	441
	1140763	VERMONT	3	3	10877	3.8	413	3	21	11750	419	1	12016	435
		MASSACHUSETTS	1	1	15610	3.7	578	1	99	14970	568	1	13974	534
		RHODE ISLAND	1	1	10490	3.8	402	1	21	11190	425	1	11761	436
		CONNECTICUT	1	1	9410	4.0	373	1	4	6940	317	1	9494	408
		NEW YORK	186	186	13308	3.8	505	177	20	12916	473	1	13358	486
		PENNSYLVANIA	3	3	14367	3.5	508	3	13	12630	446	1	11380	438
	1141306	NEW YORK	13	13	11166	3.8	414	11	10	11215	415	1	14034	516
		PENNSYLVANIA	1	1	13450	3.5	475	1	18	11060	380	1	12263	426
	1143578	VERMONT	4	7	13571	3.7	486	4	9	11431	420	2	12185	441
		MASSACHUSETTS	2	2	12340	4.2	505	2	145	15105	571	1	14672	557

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LBS.	TEST PCT.	FAT LBS.	305-DAY NO. OAS.	CONTEMPORARY RECORDS NO.	MILK LBS.	FAT LBS.	AV. RECORDS NO.	YEARLY RECORDS NO.	HERO MILK LBS.	AV. FAT LBS.
		NEW YORK	145	163	12483	3.8	472	119	18	12662	458	1	12976	470	
		PENNSYLVANIA	3	4	11393	3.7	426	3	20	10615	377	1	11172	403	
	1143579	NEW YORK	9	17	12641	3.4	429	1	7	13450	471	1	12273	450	
	1157094	VERMONT	3	4	9913	3.3	324	2	6	7610	280	1	9352	342	
		MASSACHUSETTS	1	2	14955	3.8	571	1	82	15200	573	2	13930	533	
		NEW YORK	21	30	11852	3.5	410	12	18	12911	461	1	12718	459	
	1157806	VERMONT	3	3	14473	3.4	495	3	3	12270	471	1	14933	536	
		NEW YORK	77	95	10590	3.8	403	62	16	12175	445	1	12446	454	
		PENNSYLVANIA	1	1	12120	3.5	418	1	26	10620	377	1	11194	401	
	1163116	VERMONT	15	17	12656	3.6	459	14	27	12095	449	1	12916	475	
		MASSACHUSETTS	2	2	16365	3.8	616	2	149	15080	584	1	14672	557	
		RHODE ISLAND	1	1	14750	3.5	520	1	8	12100	471				
		NEW YORK	241	317	12244	3.7	457	190	20	12688	463	1	12947	473	
		PENNSYLVANIA	4	5	11604	3.5	409	4	22	10819	388	1	11192	406	
		DELAWARE	1	1	12020	3.9	466	1	12	11260	465	1	10551	463	
		MARYLAND	2	2	13520	3.6	492	1	139	12110	490	1	13249	479	
	1170480	VERMONT	6	6	9880	3.9	383	5	15	11208	411	1	11449	434	
		MASSACHUSETTS	2	3	12065	4.2	504	2	42	15085	559	2	14271	536	
		CONNECTICUT	1	2	14095	3.6	506	1	35	12550	529				
		NEW YORK	127	177	11188	3.7	416	89	16	12551	460	1	12524	459	
		NEW JERSEY	1	2	10120	3.3	333								
		PENNSYLVANIA	5	9	9951	3.8	370	4	18	10341	372	2	10402	378	
		MICHIGAN	1	2	18060	3.6	636	1	5	14940	544	1	14050	511	
	1175404	VERMONT	6	7	12553	3.8	477	5	29	13158	469	1	13504	488	
		NEW YORK	90	115	11942	3.7	436	67	18	12574	447	1	12539	449	
		PENNSYLVANIA	1	1	3020	3.7	112	1	17	13130	516	1	10181	424	
		MARYLAND	1	3	15700	3.7	579	1	5	13087	475	1	10747	398	
	1179729	VERMONT	3	3	12843	3.6	456	2	16	11490	466	1	11974	450	
		MASSACHUSETTS	1	1	17110	3.5	606	1	19	12250	564	1	12982	477	
		CONNECTICUT	2	3	17568	3.7	641	2	7	13923	512	2	14067	526	
		NEW YORK	122	161	12402	3.6	449	102	16	12529	455	1	12526	454	
	1180758	VERMONT	5	7	11097	3.6	400	3	34	11678	420	2	12315	439	
		MASSACHUSETTS	1	2	7280	3.6	264	1	4	7020	280	2	7767	300	
		NEW YORK	78	122	12415	3.8	465	58	21	12782	464	2	12608	454	
		PENNSYLVANIA	1	2	11090	3.9	425	1	10	13130	473	1	12775	447	
		MARYLAND	1	1	13470	3.7	505	1	8	9610	456	1	10486	458	
	1181675	VERMONT	7	10	12307	3.6	442	4	41	11118	428	1	12477	473	
		NEW YORK	154	227	12875	3.5	453	101	18	12901	461	1	12745	459	
		PENNSYLVANIA	5	13	12579	3.8	471	5	16	11814	446	2	11717	446	
	1191920	VERMONT	7	8	11233	3.5	400	6	35	11552	420	1	11215	408	
		NEW YORK	180	228	12530	3.6	451	141	17	12602	461	1	12852	463	
		PENNSYLVANIA	5	7	15329	3.5	530	4	36	12373	465	2	14411	535	
	1194691	VERMONT	5	6	13295	3.5	471	3	61	12982	463	1	13352	471	
		NEW YORK	43	66	13624	3.4	462	39	22	12766	464	2	12490	455	
	1215895	VERMONT	2	2	10845	3.6	387	2	21	12500	475	1	11113	403	
		NEW YORK	70	90	12434	3.6	447	70	20	12615	457	1	12651	457	
	1216123	VERMONT	2	3	12485	3.8	468	2	10	13760	493	1	12318	451	
		NEW YORK	104	137	11931	3.9	460	94	20	12631	460	1	12725	465	
		NEW JERSEY	1	1	12900	4.0	514	1	59	12370	467	1	12917	487	
		PENNSYLVANIA	1	2	12700	4.1	523	1	26	12995	496	2	13135	493	
	1216124	VERMONT	3	5	8480	3.6	296	3	14	11247	406	2	10413	379	
		NEW YORK	30	38	12520	3.4	430	26	24	12645	457	1	12577	460	
	1229288	NEW YORK	35	44	12097	3.7	444	35	19	12690	459	1	12909	470	
	1239885	VERMONT	3	3	8800	3.7	332	3	25	10820	408	1	11351	429	
		NEW YORK	54	68	11825	3.9	453	53	18	12459	502	1	12789	467	
		NEW JERSEY	1	2	13660	3.6	499	1	13	13380	503	2	13358	511	
	1239886	VERMONT	2	2	13100	4.0	515	2	48	12130	454	1	12693	465	
		MASSACHUSETTS	2	3	18233	3.7	669	2	137	14930	579	2	14410	550	
		NEW YORK	86	107	13581	3.7	505	84	19	12956	469	1	12960	471	
		MARYLAND	1	1	16080	4.4	702	1	139	12110	489	1	11510	463	
	1240125	VERMONT	2	2	10505	4.1	432	2	9	11385	391	1	11478	403	
		MASSACHUSETTS	1	1	17330	3.8	666	1	147	15530	589	1	14737	555	
		NEW YORK	60	68	13990	3.6	507	58	21	12518	455	1	12574	453	
		PENNSYLVANIA	1	2	12475	3.6	444	1	12	11740	406	2	12246	429	
	1241982	VERMONT	1	1	13590	3.2	434	1	15	11300	427				
		NEW YORK	53	67	13302	3.5	460	51	20	12625	458	1	12556	452	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREEO	SIRE NO.	RECOROS FROM STATE NEW JERSEY	DAUGHTERS NO. 1	RECOROS NO. 2	MILK LB. 13105	TEST PCT. 3.8	FAT LB. 4.91	305-DAY CONTEMPORARY			AV. FAT LB. 551	YEARLY HERD			AV. FAT LB. 458
								NO. DAUS. 1	RECORDS NO. 21	MILK LB. 14910		RECORDS NO. 2	MILK LB. 12295		
	1242163	VERMONT	1	1	14740	3.3	489	1	1	12830	462	1	10682	401	
		MASSACHUSETTS	1	1	16340	3.6	588	1	147	14170	558	1	13974	534	
		NEW YORK	25	27	14354	3.4	485	25	19	13528	489	1	13094	474	
	1242164	VERMONT	1	1	8060	3.4	275	1	2	10330	409				
		MASSACHUSETTS	1	2	14900	3.7	547	1	123	15260	580	2	14476	552	
		NEW YORK	38	45	12181	3.6	436	38	21	12445	461	1	12649	465	
	1244917	VERMONT	3	3	11237	3.5	380	3	9	11720	419	1	10492	377	
		NEW YORK	22	23	13778	3.5	484	22	20	12852	467	1	12999	476	
	1245520	VERMONT	2	2	9595	3.7	354	2	34	9695	355	1	10203	374	
		NEW YORK	59	74	13844	3.6	497	59	20	12950	472	1	13114	477	
		PENNSYLVANIA	1	1	13000	4.0	523	1	23	12330	448	1	12960	496	
	1246215	VERMONT	3	3	8073	3.6	290	3	17	9800	359	1	11074	398	
		NEW YORK	35	42	11376	3.7	421	35	22	12807	464	1	13211	481	
	1247963	NEW YORK	23	23	13614	3.4	477	23	16	12866	475	1	12776	472	
	1249318	VERMONT	1	1	14300	3.3	475	1	42	12050	434	1	12797	464	
		MASSACHUSETTS	1	1	18500	3.4	635	1	7	13190	520				
		NEW YORK	59	59	13300	3.6	473	59	19	12702	461	1	13048	471	
	1249697	NEW YORK	2	2	11570	3.7	415	2	41	12235	440	1	12688	447	
	1252934	VERMONT	3	3	12193	3.8	461	3	10	11933	447	1	13309	492	
		NEW YORK	36	39	14454	3.7	525	35	17	13376	484	1	13575	494	
		MARYLAND	1	2	14895	3.2	483	1	35	13315	515	2	12164	479	
	1254663	MAINE	1	1	10340	3.7	381	1	13	9960	444	1	10693	475	
		VERMONT	1	1	10970	3.4	376	1	21	13190	475	1	13015	482	
		NEW YORK	30	31	13003	3.5	451	30	17	12309	448	1	12512	452	
	1254845	VERMONT	4	5	11014	3.9	432	4	32	11394	431	1	11192	425	
		NEW YORK	55	64	12015	3.7	443	55	19	12138	442	1	12503	453	
	1255099	VERMONT	2	2	9735	3.8	367	2	10	8860	329	1	10393	396	
		NEW YORK	33	34	12571	3.7	460	33	21	12584	457	1	12749	463	
		PENNSYLVANIA	2	3	10850	3.7	398	2	21	10580	394	2	11353	422	
	1261298	VERMONT	4	4	11800	3.7	437	4	17	11845	425	1	11884	443	
		NEW YORK	55	56	11615	3.8	438	52	18	12495	457	1	12946	474	
		PENNSYLVANIA	2	2	12680	3.6	462	2	24	12785	473	1	13342	489	
	1262324	VERMONT	1	1	8690	3.3	291	1	2	8500	296	1	8186	295	
		NEW YORK	16	16	14021	3.7	524	15	17	12516	448	1	12824	463	
		PENNSYLVANIA	1	1	11740	3.4	399	1	14	12750	475	1	12960	496	
	1262609	NEW YORK	1	1	8410	3.4	289					1	15685	589	
		MARYLAND	1	1	15800	3.7	588	1	1	7420	241				
	1263223	CONNECTICUT	1	1	12190	3.9	480	1	4	18800	694	1	15260	559	
		NEW YORK	8	9	13664	3.6	507	5	16	12301	474	1	12960	487	
	1263834	VERMONT	2	2	9720	4.0	393	2	57	11860	434	1	10666	407	
		NEW YORK	15	15	13770	3.9	541	15	24	13309	495	1	13463	502	
		PENNSYLVANIA	1	1	12530	3.5	432	1	10	12180	448	1	11652	412	
	1263835	NEW YORK	12	12	13028	3.6	470	12	21	12822	465	1	13058	478	
	1264726	NEW YORK	14	14	12606	3.9	488	14	21	13713	498	1	13288	491	
	1268131	VERMONT	2	2	12320	3.9	471	2	57	11480	423	1	10666	407	
		NEW YORK	41	41	12256	3.9	471	38	20	12991	475	1	13342	484	
	1269541	NEW YORK	3	3	12757	3.6	455	3	12	11850	407	1	12422	443	
	1269968	NEW YORK	1	1	6200	3.9	241	1	1	6750	241	1	11412	412	
	1271758	VERMONT	2	2	9885	3.5	345	2	28	12380	436	1	12797	464	
		RHODE ISLAND	1	1	10590	3.4	357	1	14	10590	405	1	11761	436	
		NEW YORK	25	25	11958	3.6	430	23	18	13365	488	1	13192	483	
	1272013	NEW YORK	17	17	11609	3.5	406	14	18	11749	426	1	13193	474	
	1275113	VERMONT	1	1	11350	3.6	408	1	18	12490	470	1	13113	489	
		NEW YORK	6	6	10930	3.6	391	6	24	12188	449	1	13209	481	
	1275604	NEW YORK	1	1	10270	4.0	408					1	12568	443	
	1276286	VERMONT	1	1	12300	3.5	426	1	42	12100	435	1	12797	464	
		NEW YORK	13	13	11185	3.6	404	13	15	11578	415	1	12617	455	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY NO.	RECORDS NO.	MILK LB.	FAT LB.	YEARLY HERD NO.	RECORDS NO.	MILK LB.	FAT LB.
	1281699	NEW YORK	6	6	9640	3.7	362	5	4	7296	281	1	12252	458	
	1285952	NEW YDRK	3	3	12027	3.8	455	1	2	12700	422	1	13923	519	
	1288633														
		NEW YDRK	4	4	5593	3.7	201					1	13001	478	
JER.	353005	NEW YORK	3	5	5413	5.3	270								
	375364	VERMONT	1	1	8260	5.8	479								
		NEW YORK	41	139	7814	5.1	393	5	3	7300	397	1	8546	452	
	404595	NEW YORK	15	58	7382	5.3	391	1	2	6281	328	2	6922	352	
	413678	VERMONT	2	3	6885	5.1	331								
		NEW YDRK	13	36	7453	5.3	397	1	8	8550	422	1	8312	444	
	420752	NEW YORK	9	33	6873	5.2	361								
	422988	VERMONT	16	39	6831	5.2	351								
		MASSACHUSETTS	2	4	7484	5.7	421	1	3	6303	325	1	6595	353	
		NEW YORK	158	420	7300	5.4	393	16	8	7220	368	2	7546	389	
		MARYLAND	1	3	10423	5.3	553	1	6	7607	408	1	8153	432	
	424369	VERMONT	2	2	9360	5.0	468								
		NEW YORK	38	93	7083	5.6	393	2	52	7660	397	1	8028	429	
	425708	NEW YDRK	1	1	6580	5.0	329								
	435557	NEW YORK	1	7	7289	5.6	408								
	435963	VERMONT	3	9	7050	5.3	367								
		NEW YORK	57	185	7357	5.4	394	2	2	8028	439	3	8192	455	
	442167	MAINE	1	1	11630	4.3	502	1	1	8090	451				
		VERMONT	4	11	6279	4.7	296								
		NEW YORK	65	144	7822	4.9	375	7	11	8011	395	1	7809	389	
	444468	VERMONT	11	22	8440	4.9	397	1	1	16770	578	1	9592	404	
		CONNECTICUT	1	1	8610	4.9	418	1	11	7760	391	1	10835	525	
		NEW YDRK	78	153	7367	5.2	381	7	27	8433	443	2	8429	432	
		OHIO	1	1	8240	5.4	443								
	444958	VERMONT	5	10	7288	5.1	372								
		NEW YDRK	38	107	7038	5.3	370	2	35	8450	458	1	8333	445	
	449292	VERMONT	3	5	7483	5.4	405	1	4	7590	408	1	6562	354	
		NEW YDRK	18	23	7482	5.3	392	3	7	7283	376	1	8956	436	
	455387	NEW YORK	46	156	7161	5.3	376	3	31	8707	443	2	8653	460	
	456947	MAINE	1	1	8120	5.3	431								
		VERMONT	11	23	6401	5.4	349								
		CONNECTICUT	1	1	7630	5.2	398	1	6	8430	442	1	8807	453	
		NEW YORK	95	228	7485	5.3	394	10	14	8125	425	1	8141	432	
	457043	VERMONT	12	18	8624	5.2	442	5	19	9315	480	1	10281	526	
		NEW YORK	120	315	8071	5.3	424	15	11	7632	406	2	8100	413	
	458159	VERMONT	3	3	6760	5.4	364	1	7	12550	569				
		NEW YDRK	54	90	7644	5.1	382	5	12	8130	420	2	8270	411	
		PENNSYLVANIA	1	1	7660	4.6	355					1	8349	387	
	460497	VERMONT	23	36	7886	5.3	410	9	32	8577	439	1	9007	455	
		MASSACHUSETTS	1	1	9170	5.2	475	1	7	10210	506	1	9527	504	
		CONNECTICUT	11	31	8783	5.6	497	3	11	8436	453	2	9162	462	
		NEW YORK	184	308	7998	5.3	419	74	25	8175	421	1	8781	435	
		WEST VIRGINIA	1	2	5840	4.8	280								
	465030	VERMONT	7	11	6731	5.2	341								
		NEW YORK	43	89	7543	5.2	392	3	11	7139	414	2	7916	385	
		PENNSYLVANIA	1	1	8380	4.8	406					1	9058	438	
	466748	VERMONT	13	26	7295	5.2	368								
		NEW YORK	98	289	7529	5.3	395	5	25	7658	408	2	6989	362	
	468045	VERMONT	2	2	4940	5.1	258								
		NEW YDRK	9	13	7540	5.3	397	1	12	8480	386	1	6965	344	
	473955	VERMONT	2	10	6005	5.6	337								
		MASSACHUSETTS	1	1	5040	5.2	263								
		NEW YORK	7	16	7103	5.5	391								
	474643	VERMONT	5	8	6837	6.1	416								
		MASSACHUSETTS	1	3	7697	5.3	415	1	10	10480	498	2	9292	416	

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV. NO.	YEARLY HERD AV.		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		CONNECTICUT	1	5	9304	5.7	534							
		NEW YORK	106	250	7093	5.5	390	12	13	8257	425	2	8472	435
		OHIO	1	4	8908	6.1	541							
482585		VERMONT	13	19	8141	5.0	409	4	28	8646	449	2	8349	433
		CONNECTICUT	1	1	9140	4.8	441							
		NEW YORK	156	375	8108	5.0	401	42	27	8022	414	2	8356	420
		NEW JERSEY	1	2	8310	4.9	401							
482718		VERMONT	1	2	8065	5.4	435							
		NEW YORK	26	58	6742	5.6	372							
483727		VERMONT	3	4	5588	5.0	292							
		NEW YORK	49	80	7825	5.0	391	14	22	8364	421	2	8005	397
485170		MAINE	1	1	8090	5.6	451	1	1	11630	502			
		VERMONT	13	25	7488	4.8	359	1	1	7060	341			
		MASSACHUSETTS	1	4	7670	4.8	368	1	7	8738	446	3	8357	428
		NEW YORK	86	183	7712	5.0	380	3	6	8708	463	1	8371	453
		MARYLAND	1	4	7448	4.4	332	1	4	8405	452	1	7314	380
487198		VERMONT	4	9	6933	5.3	370	2	25	7245	392	1	7609	399
		NEW YORK	61	120	7706	5.3	411	31	30	7814	405	1	8762	434
487844		NEW YORK	2	3	4788	5.1	244							
488182		VERMONT	11	18	7876	5.1	400	6	31	7713	394	1	8278	422
		NEW YORK	91	169	8110	5.1	413	56	24	8040	417	1	8546	434
		PENNSYLVANIA	1	1	2730	5.2	142							
488291		NEW YORK	3	8	8561	4.9	414							
490529		VERMONT	3	3	8130	5.3	431	2	32	8030	428	1	6954	365
		NEW YORK	68	118	8433	5.1	428	22	17	7940	414	1	8867	430
		PENNSYLVANIA	3	4	4525	5.3	231							
495230		VERMONT	1	3	6853	5.8	398							
		NEW YORK	15	30	7042	5.4	380	2	26	8720	465	1	8366	437
		NEW JERSEY	1	2	8640	4.6	397							
496090		NEW YORK	9	26	7986	5.2	414	1	35	7540	398	1	7935	416
498531		VERMONT	10	14	8514	5.7	481	5	22	8438	430	1	9049	462
		MASSACHUSETTS	1	3	6950	4.9	336	1	39	8580	431	3	8651	437
		NEW YORK	84	145	7621	5.4	411	38	27	8178	418	1	8716	441
503554		VERMONT	12	21	7443	5.2	388	8	25	8603	453	2	9004	467
		NEW YORK	50	74	8307	5.2	429	28	25	8240	434	1	9125	456
515973		VERMONT	4	5	7270	5.2	376							
		NEW YORK	24	44	7724	5.3	409	1	7	10030	439	4	8459	438
		PENNSYLVANIA	1	1	7980	4.8	385					1	8622	416
519812		VERMONT	2	4	6319	5.2	325							
		NEW YORK	7	12	7622	5.3	403							
534376		NEW YORK	11	20	6542	5.5	362	2	14	8115	410	2	8197	414
535504		VERMONT	4	6	5693	5.9	339	3	12	9675	447	2	8704	350
		NEW YORK	42	72	7489	5.5	408	12	28	8019	403	2	8946	434
		OHIO	1	2	6370	6.3	401	1	4	8680	351	1	9745	378
542908		VERMONT	2	3	7953	5.2	408	1	11	8310	444	1	9211	474
		NEW YORK	8	12	7953	5.6	439	5	22	7989	401	1	8040	416
549805		VERMONT	9	13	8528	5.3	453	7	31	8723	456	1	9110	482
		NEW YORK	56	88	7758	5.3	405	33	25	8404	429	1	8520	433
554822		VERMONT	5	6	7388	5.3	387	4	20	9303	487	1	7914	421
		NEW YORK	19	33	8165	5.5	450	16	22	8256	428	1	8167	425
563414		VERMONT	4	4	7530	5.6	407	2	9	8210	384	1	8513	436
		NEW YORK	13	16	7583	5.3	401	5	33	8240	414	1	10201	460
563658		VERMONT	4	4	7868	5.6	432	4	13	7638	403	1	7971	417
		NEW YORK	54	74	7335	5.6	411	44	26	8004	417	1	8743	435
		PENNSYLVANIA	1	1	8520	5.4	463	1	23	8010	421	1	9036	485
		OHIO	1	1	8610	4.9	425							
563945		NEW YORK	19	20	8107	4.8	391	18	28	7626	393	1	8691	421
568194		NEW YORK	16	16	7406	5.1	374	11	26	9295	481	1	9353	472
568229		VERMONT	1	1	7560	5.7	433							
		NEW YORK	3	3	5593	5.2	292	1	40	7630	408			

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY RECORDS NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
B.S.		38049	VERMONT	4	9	8537	3.9	332							
			MASSACHUSETTS	1	2	11785	4.6	541	1	2	12725	541			
			NEW YORK	48	80	8772	4.2	366	2	8	10015	415	1	9914	412
			NEW JERSEY	2	2	9680	4.2	396	2	11	11570	499	1	11467	477
			PENNSYLVANIA	1	3	10537	3.8	399							
			OHIO	1	2	9645	4.2	406	1	4	10190	422			
			MARYLAND	3	7	11386	4.1	476					1	9750	387
			GEORGIA	1	1	7190	4.2	302							
		50092	VERMONT	5	9	10192	4.0	409							
			CONNECTICUT	1	2	8670	3.5	306							
			NEW YORK	24	53	9517	4.0	382	1	19	10520	427	1	10867	441
			NEW JERSEY	2	9	12581	3.9	486	1	2	9706	430	4	10505	451
			PENNSYLVANIA	1	1	8120	3.7	303							
		59811	VERMONT	2	2	9725	4.2	410							
			MASSACHUSETTS	1	1	9530	4.0	382							
			NEW YORK	59	120	9801	4.2	414	6	9	10716	441	1	11450	464
			PENNSYLVANIA	3	6	7414	4.4	325	3	5	9302	368	3	10531	449
		68354	NEW HAMPSHIRE	5	7	7907	4.1	319	2	7	10197	420	2	10581	436
			VERMONT	10	15	10694	4.2	449	3	14	12500	537	1	11278	493
			NEW YORK	125	220	9958	4.2	418	49	15	10623	442	1	11002	449
			NEW JERSEY	1	1	15090	4.0	607	1	27	12160	503	1	12829	526
			PENNSYLVANIA	5	7	8995	4.3	383	2	18	10740	459	1	9380	379
			OHIO	1	3	10300	4.1	419	1	3	11190	456	2	10045	389
			MARYLAND	4	9	11820	4.0	475					1	10230	404
			GEORGIA	1	1	12460	4.2	519							
		68355	NEW YORK	19	47	10873	4.2	452					1	13151	525
			PENNSYLVANIA	2	5	8736	4.1	364	1	4	7000	259			
			OHIO	1	1	13970	3.9	547	1	14	9680	401	1	11053	425
			MARYLAND	3	4	9323	4.1	377					2	10756	432
		74062	NEW HAMPSHIRE	2	3	8788	4.1	353	1	7	7330	301	1	7467	304
			VERMONT	7	11	10874	4.1	442	2	6	9525	406	1	7445	328
			MASSACHUSETTS	1	1	12780	4.3	544	1	27	8400	348	1	8982	366
			CONNECTICUT	1	1	7180	4.5	320					1	12372	470
			NEW YORK	60	96	10359	4.1	425	28	17	10686	440	1	11070	448
			NEW JERSEY	1	1	7390	4.2	312	1	2	8910	373			
			PENNSYLVANIA	1	2	12300	4.0	490							
			OHIO	1	1	13060	3.7	478	1	21	10750	426	1	10333	407
			MARYLAND	4	7	8919	3.9	349					2	10537	424
		76135	NEW YORK	35	82	9922	4.0	395	9	8	10945	442	2	11526	456
		76202	NEW HAMPSHIRE	1	1	6350	4.4	278	1	7	7620	310	1	7467	304
			VERMONT	11	17	9560	4.5	429	2	2	10755	412			
			CONNECTICUT	8	9	12006	4.5	544	5	22	12053	522	1	11414	489
			NEW YORK	139	226	10315	4.3	446	65	16	10890	447	2	11297	457
			NEW JERSEY	2	2	9735	4.6	448							
			PENNSYLVANIA	2	6	10710	4.3	463							
			OHIO	2	3	12058	3.7	446	1	3	11460	467	1	10006	379
			MARYLAND	5	8	10963	4.4	482	2	14	11900	513	1	10715	421
			GEORGIA	1	2	11720	4.2	496	1	28	11760	483			
		87677	NEW HAMPSHIRE	3	7	10309	4.6	471					1	12404	481
			VERMONT	9	14	11762	4.3	506	2	6	12170	517	2	9470	417
			MASSACHUSETTS	1	2	7190	4.8	344	1	47	12190	550	1	12077	544
			NEW YORK	59	121	9282	4.1	383	20	19	10807	462	2	10567	437
			NEW JERSEY	1	6	9850	4.3	421							
			PENNSYLVANIA	1	2	8705	4.3	375							
			OHIO	1	1	8620	3.4	294	1	4	11450	455	1	11271	475
			MARYLAND	1	2	6635	4.4	287	1	3	9330	405	1	11925	441
		88455	NEW YORK	6	9	10895	4.1	448	1	4	11400	498	1	10704	440
			NEW JERSEY	1	4	12383	4.5	552							
		93771	NEW HAMPSHIRE	3	3	9163	4.1	372	3	6	9183	382	1	9865	407
			VERMONT	11	15	9675	4.4	424	3	8	13325	564	2	12500	526
			MASSACHUSETTS	1	1	13060	4.1	533							
			CONNECTICUT	8	10	11443	4.5	519	6	19	12645	536	1	11805	506
			NEW YORK	100	140	10577	4.3	454	57	16	10786	451	1	11463	468
			PENNSYLVANIA	1	1	16120	3.8	615	1	12	11680	454	1	13178	533
			OHIO	1	2	13750	3.9	540	1	14	12440	505	1	12099	492
			MARYLAND	5	13	11547	4.1	465					2	10237	409
			VIRGINIA	2	4	9817	4.6	452	2	34	11070	465	1	11391	488
			NORTH CAROLINA	1	1	9030	3.9	352					1	10366	362
			GEORGIA	1	1	11300	4.0	456	1	3	15930	563			
		94392	NEW HAMPSHIRE	1	2	9470	4.2	397	1	7	10315	428	1	9080	373
			VERMONT	8	9	9620	4.1	402							
			MASSACHUSETTS	2	4	6957	4.3	296	1	17	8550	353	1	8960	363
			NEW YORK	75	128	10138	4.3	437	29	15	11006	465	2	11357	474

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREEO	SIRE NO.	RECOROS FROM STATE	DAUGHTERS NO.	RECOROS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.								
									NO. OAS.	RECOROS NO.	MILK LB.	FAT LB.	RECOROS NO.	MILK LB.	FAT LB.						
002	GUER	94665	NEW JERSEY	1	2	5935	4.5	267													
			PENNSYLVANIA	2	3	14045	4.0	560	1	12	11800	456	1	12099	491						
			MARYLAND	2	3	11293	4.2	474	2	6	10675	470	1	11925	441						
			GEORGIA	1	2	6340	4.5	281	1	2	9340	382									
		100544	NEW HAMPSHIRE	1	1	4810	3.7	179													
			VERMONT	2	4	12202	4.6	553	1	18	11833	474	3	10021	409						
			MASSACHUSETTS	1	1	16190	4.2	678													
			NEW YORK	71	132	9968	4.2	418	18	18	11267	463	1	11471	468						
			PENNSYLVANIA	1	2	9285	4.2	390													
		MARYLAND	1	4	9398	4.0	371					2	10197	411							
		105570	NEW HAMPSHIRE	1	2	11000	3.9	433	1	9	10070	417	2	9614	391						
			VERMONT	1	1	10270	3.8	395	1	1	13140	557	1	11031	441						
			NEW YORK	15	26	8511	4.3	364	4	9	10108	426	3	9556	405						
			PENNSYLVANIA	1	2	9220	4.1	379													
		113594	VERMONT	5	9	9611	4.3	412					1	10769	448						
			CONNECTICUT	1	4	13590	4.4	603	1	20	13063	573	4	12116	531						
			NEW YORK	19	36	11280	4.2	476	8	16	11694	487	2	11326	458						
			DELAWARE	1	1	12180	4.2	515													
		120448	MAINE	1	1	11460	4.1	468													
			NEW HAMPSHIRE	6	6	8850	4.1	364	6	7	8763	352	1	9066	368						
			VERMONT	14	15	11026	4.2	462	6	12	10639	436	1	10565	447						
			MASSACHUSETTS	3	3	10987	4.6	508	1	63	9160	387	1	10797	433						
			RHOEE ISLAND	1	1	12910	4.0	511	1	33	8680	345	1	9756	389						
			CONNECTICUT	1	1	9220	4.7	432	1	19	13580	639	1	12699	580						
			NEW YORK	93	154	9601	4.1	397	53	15	10750	443	2	11163	453						
			NEW JERSEY	1	1	14710	4.5	656													
			PENNSYLVANIA	2	4	9027	4.4	392	2	11	11538	467	2	11811	478						
			MARYLAND	10	19	11103	4.3	478	2	5	9165	405	2	10267	406						
		122766	VERMONT	1	2	10560	4.5	477	1	10	8285	353	2	7407	317						
			CONNECTICUT	1	2	13010	4.2	549	1	11	13660	583	1	12088	519						
			NEW YORK	30	40	12681	4.1	519	22	15	11187	472	1	11804	484						
			NEW JERSEY	1	1	14330	4.3	609	1	11	10190	445	1	10486	437						
			PENNSYLVANIA	1	2	12235	4.6	554													
		124609	VERMONT	2	2	6750	4.1	277					1	13472	580						
			MASSACHUSETTS	3	3	8057	4.1	346					1	9380	380						
			CONNECTICUT	3	3	9110	4.3	390	1	1	840	41	1	10900	438						
			NEW YORK	37	41	10308	4.3	438	25	17	10536	442	1	11746	478						
			MARYLAND	2	2	13190	4.8	630					1	11510	463						
		319075	NEW HAMPSHIRE	1	1	13990	3.7	523					1	12415	488						
			VERMONT	4	4	12075	4.1	497	1	1	14370	583	1	11451	455						
			NEW YORK	8	8	9573	4.0	381	4	17	10425	413	1	11796	469						
		002	GUER	249094	NEW YORK	22	61	7497	4.6	345											
					PENNSYLVANIA	16	52	8088	4.5	363	4	38	10461	380	1	10284	388				
				316538	NEW YORK	4	7	9085	4.6	415											
					PENNSYLVANIA	12	46	8053	4.3	348	4	51	10678	389	2	10306	382				
				319075	NEW JERSEY	1	1	7720	4.3	330											
					PENNSYLVANIA	1	3	7010	4.5	314											
				002	HOL.	695644	NEW HAMPSHIRE	2	2	10990	3.9	395									
							VERMONT	2	6	11045	3.6	389									
						MASSACHUSETTS	2	6	11300	3.7	413										
						NEW YORK	80	200	11040	3.6	399										
		NEW JERSEY	1			2	12530	3.7	455												
		PENNSYLVANIA	41			104	11438	3.6	407	7	9	12788	475	2	11992	444					
		MICHIGAN	1			1	6020	3.9	237												
		NEBRASKA	1			1	14270	3.3	472												
		MARYLAND	1			4	12668	3.6	447	1	8	11603	447	1	12731	476					
		VIRGINIA	5			13	9296	3.6	336												
		002	JER.	973635	NEW YORK	22	51	10056	3.6	365											
					PENNSYLVANIA	31	92	10634	3.6	384	20	12	11114	404	3	10991	395				
				410458	NEW YORK	12	36	7491	5.0	374											
					PENNSYLVANIA	3	5	5598	5.1	281											
		002	GUER	443591	NEW YORK	1	4	8228	5.3	433											
				506295	NEW YORK	2	5	7470	5.7	429											
003	GUER	353825	PENNSYLVANIA	4	15	6502	4.4	287	1	43	10768	383									
			HOL.	673095	NEW YORK	81	270	12536	3.5	438	2	3	13968	514	1	10867	385				
		673095	NEW JERSEY	2	11	13118	3.5	466													
			PENNSYLVANIA	44	147	12484	3.5	436	18	13	11987	430	2	12261	446						
MARYLAND	1	1	10300	3.7	383																

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY DAUS. NO.	CONTEMPORARY NO.	MILK LB.	AV. FAT LB.	YEARLY HERD NO.	MILK LB.	AV. FAT LB.
	682072	NEW YORK	152	502	11226	3.7	417	5	8	13327	489	2	12291	455
		NEW JERSEY	2	2	11335	3.5	387							
		PENNSYLVANIA	141	452	10648	3.7	389	51	13	11510	417	2	11270	412
		MINNESOTA	1	1	12160	4.5	548							
	698483	CONNECTICUT	1	7	13070	3.3	437	1	2	12812	455	2	11293	398
		NEW YORK	63	179	11856	3.4	406	1	7	12580	462			
		NEW JERSEY	2	8	11272	3.5	395							
		PENNSYLVANIA	64	206	11827	3.4	402	26	17	11995	430	2	11484	423
		MARYLAND	1	5	12906	3.7	477							
	747241	MASSACHUSETTS	2	6	9872	3.5	348	1	4	12652	468	1	11467	411
		NEW YORK	78	261	11595	3.5	406	1	17	12490	467	1	11271	417
		NEW JERSEY	1	5	15950	3.2	519							
		PENNSYLVANIA	59	200	11944	3.5	412	18	15	11733	429	2	11754	432
		ILLINOIS	1	1	12020	2.7	321							
		CALIFORNIA	1	1	13200	3.6	481							
	778700	CONNECTICUT	1	4	22465	2.9	657	1	20	17798	577	1	18268	635
		NEW YORK	56	207	12205	3.4	409	1	12	12230	412	1	12273	412
		NEW JERSEY	2	8	10890	3.6	387							
		PENNSYLVANIA	75	255	12011	3.4	400	36	16	11163	413	2	11355	420
		MARYLAND	1	1	12980	3.4	440							
		WASHINGTON	1	1	13850	3.9	544							
	792129	NEW YORK	87	240	11185	3.5	395	3	7	12361	451	3	10920	396
		NEW JERSEY	5	12	11518	3.3	385							
		PENNSYLVANIA	95	266	10876	3.5	375	36	15	11565	423	2	11238	412
		MARYLAND	2	5	8400	3.4	279							
	800015	MASSACHUSETTS	1	4	10118	3.4	339	1	3	9380	356	1	9080	342
		NEW YORK	22	54	11575	3.5	414							
		NEW JERSEY	1	5	11124	3.9	439							
		PENNSYLVANIA	21	55	11469	3.6	407	8	16	11434	427	2	11444	428
		VIRGINIA	2	6	11810	3.4	394							
JER.	409543	NEW YORK	15	50	7877	5.2	409							
		PENNSYLVANIA	7	22	7026	4.7	328							
		MINNESOTA	2	2	6765	4.5	303							
	484713	MASSACHUSETTS	2	10	9372	6.0	558	1	6	11004	568	5	11050	576
		CONNECTICUT	1	5	8706	4.9	430	1	8	9760	509	5	9099	467
		NEW YORK	12	42	8571	5.4	459	1	2	8570	455	1	10628	566
		PENNSYLVANIA	1	1	8380	5.1	423	1	2	10270	572			
004 HOL.	1022593	MASSACHUSETTS	1	2	5530	4.0	220	1	14	8110	298	2	8497	313
		NEW YORK	28	61	11892	3.8	454	11	25	12081	447	1	12432	469
		PENNSYLVANIA	2	3	9500	4.0	383	2	15	11803	423	2	11805	440
		MARYLAND	3	5	11668	3.7	427	2	18	11718	422	2	11206	397
		VIRGINIA	1	1	10360	4.5	466							
		NORTH CAROLINA	1	1	6800	4.3	295	1	35	10200	347	1	10431	361
	1107436	NEW HAMPSHIRE	1	1	7610	4.1	312	1	16	11180	433	1	10813	413
		MASSACHUSETTS	28	49	12750	3.7	464	27	22	13401	482	2	12940	477
		CONNECTICUT	6	8	12797	3.6	455	6	5	14823	537	1	13670	492
		NEW YORK	95	180	11391	3.6	414	44	16	12481	461	2	12145	447
		PENNSYLVANIA	1	1	7600	3.5	269	1	9	12970	490	1	12633	461
		MICHIGAN	1	1	12770	3.0	378	1	5	15620	573			
		MARYLAND	5	9	10377	3.7	387	5	10	13057	483	1	10066	354
		SOUTH CAROLINA	1	2	15325	3.6	539	1	28	14585	515	1	15565	532
		GEORGIA	1	1	11470	4.0	457	1	1	10510	341			
	1119263	NEW YORK	92	196	11478	3.9	451	31	17	12789	478	1	12679	470
		PENNSYLVANIA	2	6	12068	3.8	450	2	12	11167	424	3	12060	454
		MARYLAND	3	7	10885	3.7	410	3	12	10670	423	2	10487	413
		VIRGINIA	2	3	7853	4.4	344							
		GEORGIA	1	1	14440	3.8	549	1	2	14710	545	1	10377	383
005 HOL.	747242	MAINE	1	1	13490	3.5	469							
		VERMONT	4	14	13413	3.3	433							
		MASSACHUSETTS	3	9	13266	3.5	454					1	12437	512
		CONNECTICUT	2	5	14062	3.4	468					2	12993	517
		NEW YORK	231	705	12397	3.5	430	16	12	13312	476	2	13194	474
		NEW JERSEY	9	22	11337	3.3	372	1	47	12940	466	1	10780	392
		PENNSYLVANIA	1	4	12650	3.4	429							
		OHIO	1	1	15660	3.1	488							
		MARYLAND	1	2	11550	3.8	437							
	748817	CONNECTICUT	1	1	9200	4.3	399							
		NEW YORK	24	79	11727	3.8	442							
		NEW JERSEY	3	9	10387	3.5	362							
	807552	NEW YORK	43	100	13253	3.6	480	14	14	13756	493	2	13730	495

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY		CONTEMPORARY		AV.		YEARLY HERD		AV. FAT LB.
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.			
006	GUER	910046	CONNECTICUT NEW YORK	1 2	1 9	10440 11580	4.1 4.3	423 485									
		951253	MASSACHUSETTS NEW YORK NEW JERSEY	1 6 1	2 24 2	9115 10404 8425	3.6 3.9 4.0	320 399 334	1 1	24 3	13485 14160	505 514	1 2	13287 12273	499 436		
		1056031	NEW YORK	71	144	13297	3.6	472	30	20	13976	507	2	13916	506		
		276883	NEW YORK	3	20	8750	4.9	426									
		279705	NEW YORK	5	13	8049	4.9	393									
	HOL.	298570	NEW YORK	1	6	7635	5.2	398									
		643460	NEW YORK	20	49	10828	3.7	400									
		739916	WISCONSIN	1	2	16675	4.0	661	1	12	14020	513	1	15533	576		
		824813	NEW YORK	7	20	11645	3.7	423									
		922287	NEW YORK PENNSYLVANIA	31 1	83 6	13331 10618	3.5 3.5	470 367	1 1	2 8	12810 10815	468 409	3 2	13098 11304	463 431		
007	GUER	262421	NEW YORK	1	1	7440	4.5	335									
	HOL.	699452	NEW YORK NEW JERSEY	7 1	13 2	11821 12670	3.5 3.6	413 455									
		738441	NEW YORK MARYLAND	3 1	7 2	10475 6985	3.4 4.0	362 275									
	772531	NEW YORK WEST VIRGINIA COLORADO	30 1 1	76 2 1	10852 11520 11840	3.6 3.6 3.3	393 419 395										
	JER.	421324	NEW YORK	2	6	5512	6.3	346									

TABLE 16.—DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS—GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY NO.	RECORDS NO.	MILK LB.	FAT LB.	YEARLY RECORDS NO.	MILK LB.	FAT LB.
000	GUER	192478	CONNECTICUT NEW JERSEY PENNSYLVANIA	1 11 1	1 19 1	7220 7802 8470	4.6 4.8 4.4	334 372 369							
		210621	NEW JERSEY	8	15	6947	5.2	357							
		211212	CONNECTICUT PENNSYLVANIA	3 2	15 10	8744 7163	4.9 4.2	427 296							
		226105	NEW JERSEY PENNSYLVANIA MARYLAND SOUTH CAROLINA	8 3 1 1	14 6 2 1	6779 8365 7510 7700	4.7 4.4 4.4 4.3	318 363 330 333	1	7	10333	488			
		281733	NEW JERSEY	1	3	7730	4.8	365							
	HOL.	589959	MARYLAND	1	1	5020	3.1	158							
		711323	NEW JERSEY	7	21	12094	3.7	442							
		724270	NEW YORK NEW JERSEY	1 3	1 9	12990 11273	3.6 3.7	465 412							
		724272	NEW JERSEY INDIANA	8 1	13 1	11270 11250	3.7 3.8	405 425							
001	GUER	226497	NEW HAMPSHIRE NEW JERSEY PENNSYLVANIA	1 1 1	4 1 2	9188 8190 6355	4.5 4.7 5.7	412 388 361							
		245488	NEW JERSEY PENNSYLVANIA MINNESOTA MARYLAND NORTH CAROLINA	7 3 3 3 1	14 4 7 13 6	8662 6778 9359 8997 11263	4.6 4.3 5.0 4.6 3.9	397 295 457 416 442	1	20	9640	377			
		279459	MASSACHUSETTS CONNECTICUT NEW JERSEY	4 1 20	12 5 53	9733 8328 8761	4.9 4.6 4.8	476 384 419	4 1 5	106 4 14	12205 7700 9502	481 365 451	3 4 3	11838 7589 8689	475 350 420
		288923	MASSACHUSETTS NEW JERSEY MINNESOTA	1 4 1	3 9 2	6463 7864 8000	4.3 5.0 4.8	276 386 384	1 1 1	94 59 10	11850 8530 8735	468 408 419	2 1 2	11522 9047 8927	457 432 423
		314824	MASSACHUSETTS NEW YORK NEW JERSEY	5 1 19	16 2 64	9080 8765 8100	4.6 4.5 4.8	416 391 385	3	98	12189	471	3	11760	464
		332185	MASSACHUSETTS NEW JERSEY	1 1	2 2	9005 6965	4.7 4.9	421 340	1 1	114 49	11835 10165	466 436	2 2	11522 10579	457 480
		336535	MASSACHUSETTS CONNECTICUT NEW YORK NEW JERSEY PENNSYLVANIA INDIANA DELAWARE VIRGINIA NORTH CAROLINA	1 1 1 18 3 4 1 1 1	2 1 1 56 14 15 1 4 1	7450 7960 7110 8428 7257 10081 8830 9293 10880	5.2 5.4 5.7 5.0 4.6 5.1 5.2 5.0 4.1	381 434 402 415 327 514 458 457 443	1 3 2 2 3 2 1	116 8 4 31 8 4 1	11840 8818 10466 9220 8818 8454 7840	460 418 542 409 418 542 372	1 3 5 2 3 5 1	11249 9116 9016 9116 9016 10649 7510	451 429 412 429 412 554 339
		336587	MASSACHUSETTS NEW JERSEY MARYLAND	1 4 1	1 9 1	7980 8380 5050	4.7 5.1 4.5	377 421 227							
		346301	MASSACHUSETTS NEW JERSEY MARYLAND	20 33 3	30 68 6	6988 7958 7262	4.8 4.8 4.9	336 377 358	19 3 2	110 10 4	12417 9218 8138	487 443 402	1 1 2	11627 8693 8399	460 400 399
		363656	MASSACHUSETTS NEW JERSEY	1 7	4 14	9565 8417	4.5 4.8	424 407	1 4	79 12	13435 9454	545 426	4 2	12140 8593	494 359
		372994	MASSACHUSETTS NEW JERSEY PENNSYLVANIA	4 1 1	12 1 2	8667 8490 9530	5.1 5.1 5.3	446 437 496	4 1 1	110 9 2	12320 11475 11070	489 558 499	3 2 2	11482 8840 9968	465 407 457
		380178	MASSACHUSETTS CONNECTICUT NEW JERSEY MARYLAND IDAHO HAWAII	1 1 12 1 1 1	1 2 17 1 1 1	7210 10400 8584 8500 5630 6470	5.3 4.8 4.8 4.9 4.0 5.1	381 496 407 419 225 329	1 1 3 1 1 1	113 9 66 4 4 4	12160 11475 8740 8640	468 558 422 428	1 2 1 1 1 1	11794 13598 8840 7510	463 637 420 339

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY RECORDS NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	MILK LB.	AV. FAT LB.
	395303	NEW JERSEY	1	2	7510	4.7	350	1	23	7840	384	2	8137	386
	429396	MASSACHUSETTS	4	8	9344	4.9	455	4	83	12567	506	2	11778	482
		NEW JERSEY	5	9	8293	4.9	406							
		PENNSYLVANIA	1	2	7495	5.4	403	1	7	9500	471	2	8333	416
		SOUTH CAROLINA	1	1	8990	5.2	467	1	1	9320	494			
		FLORIDA	1	2	9575	4.2	409	1	52	7680	327	1	7586	328
	433065	NEW JERSEY	4	9	9266	4.4	405	1	8	10330	432	1	11837	471
	440968	MASSACHUSETTS	1	1	6700	4.3	290	1	104	12190	489	1	11249	451
		CONNECTICUT	1	5	8178	4.4	355	1	10	8342	381	5	7968	375
		NEW JERSEY	18	41	7752	4.5	343	1	1	10840	512	3	8626	419
		MARYLAND	1	3	6970	4.5	316							
	442561	MASSACHUSETTS	3	12	8426	4.9	413	3	110	13221	508	4	12247	478
		NEW JERSEY	31	75	8145	4.8	383	11	14	8725	406	2	8712	419
		FLORIDA	1	2	10675	4.2	446	1	7	8120	365	2	7549	355
	468441	MASSACHUSETTS	3	5	8932	5.1	448	3	100	13677	526	2	12406	484
		NEW YORK	1	1	9530	4.0	382	1	1	12090	384			
		NEW JERSEY	4	9	7486	4.8	364							
	479875	NEW JERSEY	1	2	6880	5.0	340							
	480296	NEW JERSEY	2	4	6065	5.2	304							
	494007	NEW JERSEY	2	3	6588	4.5	300	1	27	7290	338	1	7859	373
HOL.	729025	NEW JERSEY	1	2	12160	3.5	425							
	738851	VERMONT	1	1	11920	3.6	426							
		MASSACHUSETTS	42	136	12702	3.9	492	32	95	12135	472	3	11740	464
		CONNECTICUT	1	6	15705	3.7	577	1	19	14222	528	3	14166	528
		NEW YORK	3	5	13720	3.5	485							
		NEW JERSEY	167	572	11491	3.8	432	11	29	12716	465	2	11909	447
		PENNSYLVANIA	2	17	11755	3.6	424	1	8	12771	485	5	12744	489
		MICHIGAN	1	1	15090	3.6	547							
		MARYLAND	1	4	12748	3.5	451							
		VIRGINIA	3	5	12632	4.0	507	1	26	14910	596			
	748441	MAINE	1	10	15101	3.6	534	1	18	15119	563	5	15186	602
		MASSACHUSETTS	4	9	12599	4.1	515	3	108	12038	469	2	11425	455
		NEW YORK	2	4	14582	3.9	545							
		NEW JERSEY	54	171	11960	3.6	428	1	24	9830	356	1	10747	391
		PENNSYLVANIA	5	14	13592	3.7	503	1	10	9520	430	1	10017	427
		MICHIGAN	1	1	11080	2.9	325							
	749201	MAINE	1	3	11947	4.0	479							
		MASSACHUSETTS	7	14	11050	3.6	398	1	95	11880	470	2	11522	457
		NEW YORK	1	2	8835	4.4	386							
		NEW JERSEY	126	402	11947	3.6	434	10	21	12429	470	2	11902	454
	820086	CONNECTICUT	1	4	13140	3.8	501	1	14	15463	572	1	13669	511
		NEW YORK	4	6	11457	3.6	412							
		NEW JERSEY	70	178	11312	3.8	426	8	20	12099	441	1	12305	452
		PENNSYLVANIA	77	260	11982	3.7	440	28	7	12431	459	2	12312	457
		OHIO	1	1	8050	3.8	306							
		MARYLAND	3	6	12080	3.8	448	1	17	11120	398	2	11271	406
		VIRGINIA	4	11	13490	3.8	508							
	827033	NEW HAMPSHIRE	3	6	14007	4.0	555	2	24	14847	585	2	13745	537
		VERMONT	2	3	15513	3.6	554	2	24	14975	562	2	14023	530
		MASSACHUSETTS	5	17	12730	3.8	482	4	103	12241	477	3	11855	467
		NEW YORK	4	13	12123	4.1	490	1	32	15320	586	1	14922	566
		NEW JERSEY	30	96	11464	3.8	433	1	5	13679	521	3	13289	505
		PENNSYLVANIA	4	17	13304	3.7	494	4	11	10011	412	3	10037	418
		WISCONSIN	1	2	19875	3.9	779	1	16	15465	631	2	13402	546
		WEST VIRGINIA	1	4	7053	3.6	254							
	865513	MAINE	1	2	12105	3.6	427	1	6	11870	484	1	9821	382
		MASSACHUSETTS	27	39	14344	3.9	559	25	83	14010	531	1	13721	524
		CONNECTICUT	55	143	11523	3.8	431	40	13	11654	430	2	11815	437
		NEW YORK	5	9	12905	3.9	498							
		NEW JERSEY	117	208	11954	3.8	454	54	23	12837	478	1	12469	465
		PENNSYLVANIA	1	2	14075	4.5	627	1	10	13440	514	2	12726	490
		MARYLAND	1	4	13103	3.7	481	1	8	9950	362	3	12154	453
		VIRGINIA	3	4	16417	3.9	635	3	49	14118	542	1	15126	581
	869473	MASSACHUSETTS	20	55	12402	3.7	463	18	76	12652	485	3	12279	472
		NEW YORK	2	7	13039	3.5	459							
		NEW JERSEY	27	81	12113	3.8	457	4	27	13015	505	2	12561	489
		PENNSYLVANIA	1	5	14434	4.0	582	1	15	12805	477	3	13029	468
		WISCONSIN	1	1	7630	3.7	281	1	24	10720	381	1	10301	363
		KANSAS	1	3	13607	4.0	536							

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.			
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	NO. NO.	RECORDS NO.	MILK LB.	FAT LB.
		MARYLAND	1	5	13368	3.4	454	1	38	11388	425	2	12803	469	469
		NORTH CAROLINA	1	2	12130	3.7	444	1	25	12685	443	2	12432	454	454
	879309	NEW JERSEY	24	43	11348	3.8	429	14	48	12003	442	1	11633	431	431
		PENNSYLVANIA	1	2	11880	3.5	410	1	15	13155	483	2	12258	435	435
	881376	MASSACHUSETTS	10	16	13399	4.0	533	10	87	13598	512	2	12606	486	486
		RHODE ISLAND	12	31	14056	3.9	539	2	6	14136	527	2	12846	479	479
		CONNECTICUT	1	3	16800	4.0	680	1	9	16933	643	3	15500	587	587
		NEW YORK	1	1	14090	3.1	430								
		NEW JERSEY	121	240	11818	3.9	458	42	34	13018	485	1	12401	463	463
		PENNSYLVANIA	2	6	11748	3.9	451	2	10	11127	406	2	12061	445	445
		MICHIGAN	1	1	10710	3.3	354	1	7	13660	498	1	12818	456	456
		DELAWARE	1	1	8500	3.9	334	1	4	10800	396	1	10987	389	389
		MARYLAND	2	3	12303	3.9	481	2	6	10540	427				
		VIRGINIA	2	4	15063	4.2	621	1	21	15225	614	2	14803	584	584
	898193	MASSACHUSETTS	10	25	13584	3.6	491	9	107	12443	481	2	11833	467	467
		RHODE ISLAND	1	4	12325	3.8	461	1	8	11293	479	2	10606	456	456
		NEW YORK	1	8	13981	3.6	509								
		NEW JERSEY	76	217	11996	3.6	427	4	6	12101	457	2	12783	471	471
		PENNSYLVANIA	2	8	12574	3.8	472	2	12	10326	439	1	9576	410	410
		INDIANA	1	1	15720	3.2	501								
		VIRGINIA	1	1	17570	3.1	538	1	40	14840	556				
	910027	MASSACHUSETTS	2	3	14603	3.9	572	2	137	14958	579	2	14569	555	555
		RHODE ISLAND	4	7	12911	3.9	496	4	7	12276	462	2	13297	498	498
		NEW JERSEY	138	345	11426	4.0	457	42	31	12688	474	2	12527	466	466
		PENNSYLVANIA	1	3	9027	4.2	377	1	12	9943	367	3	11154	425	425
		MARYLAND	1	1	12390	4.1	505	1	16	13060	489	1	12317	461	461
	910029	MASSACHUSETTS	12	28	13400	3.9	514	12	122	13161	509	2	12461	485	485
		CONNECTICUT	2	8	17812	3.5	618	2	23	14936	562	3	14832	550	550
		NEW YORK	2	2	8130	3.5	285								
		NEW JERSEY	72	157	11598	3.8	433	16	15	12966	484	2	11852	446	446
		PENNSYLVANIA	1	3	13160	3.7	484	1	10	9233	414	2	9576	410	410
		WISCONSIN	1	2	15530	3.7	579	1	20	14420	581	2	13418	525	525
		DELAWARE	1	1	8210	3.7	304								
		VIRGINIA	2	3	14310	3.9	553	1	11	14240	530	2	13276	528	528
	920869	NEW JERSEY	7	31	12967	3.6	466								
		PENNSYLVANIA	1	4	14035	3.4	474	1	10	12898	467	2	13124	470	470
	923318	MAINE	1	1	17400	3.3	576	1	14	15050	562	1	16099	607	607
		MASSACHUSETTS	7	14	13018	3.6	462	7	90	12996	508	2	12819	494	494
		CONNECTICUT	1	3	7193	3.3	232	1	12	8053	276	3	8538	300	300
		NEW YORK	6	12	12142	3.7	448								
		NEW JERSEY	232	486	12129	3.7	446	78	27	12721	473	1	12210	455	455
		PENNSYLVANIA	4	7	13295	3.5	471	3	18	9190	353	2	9309	369	369
		WISCONSIN	3	5	13157	4.2	541	3	10	14609	587	1	13331	542	542
		KANSAS	2	3	11540	3.7	430								
		DELAWARE	1	2	9495	3.8	357	1	12	12665	450	2	13729	478	478
		VIRGINIA	6	14	12866	4.0	516	1	2	13310	513	2	12808	506	506
		NORTH CAROLINA	1	2	8255	3.7	309	1	4	9960	358	2	9407	350	350
	934577	MASSACHUSETTS	1	1	1040	4.3	45					1	14214	546	546
		NEW JERSEY	7	7	14280	3.6	529	5	8	11880	504	1	12775	504	504
	953326	NEW JERSEY	43	160	12904	3.9	497	11	7	12548	493	3	12415	475	475
		PENNSYLVANIA	1	8	16458	3.5	568	1	13	13151	488	3	13363	502	502
	965551	NEW JERSEY	42	105	9840	3.8	372	14	94	11513	410	1	11181	407	407
		PENNSYLVANIA	3	17	11669	4.0	461	3	15	11479	442	4	11471	445	445
	973474	MASSACHUSETTS	3	10	15626	3.7	577	3	103	13990	534	3	13116	507	507
		NEW JERSEY	3	8	11174	3.9	428								
	989939	MAINE	1	1	12830	4.4	558	1	24	14200	525				
		NEW HAMPSHIRE	1	1	8590	4.2	360	1	41	13680	516	1	14421	546	546
		MASSACHUSETTS	24	26	12273	4.0	467	24	72	13850	521	1	13760	521	521
		CONNECTICUT	7	9	12954	4.2	542	7	21	13660	522	1	13991	538	538
		NEW YORK	4	5	12310	4.1	506	3	25	13237	494	1	12304	475	475
		NEW JERSEY	167	203	12155	4.2	506	153	26	12860	484	1	12634	477	477
		PENNSYLVANIA	6	7	11587	4.3	499	5	7	12029	482	1	12729	511	511
		VIRGINIA	3	4	11516	4.5	518	3	20	14910	545	1	14911	561	561
	1024853	NEW JERSEY	26	33	13536	3.6	489	26	22	12774	493	1	12764	489	489
		VIRGINIA	1	1	15090	3.7	562	1	82	13820	526	1	4774	567	567
	1024880	NEW YORK	1	2	12045	3.8	460								
		NEW JERSEY	10	28	10478	3.7	388	1	28	9550	352	2	9467	349	349
		MINNESOTA	9	13	14045	3.6	500	9	23	14153	491	1	12708	493	493
	1037451	MASSACHUSETTS	1	1	7500	4.3	325	1	143	14680	552	1	14214	543	543
		NEW JERSEY	81	149	11212	3.7	413	36	30	12741	468	1	12267	452	452

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LBS.	TEST PCT.	FAT LBS.	305-DAY CONTEMPORARY				YEARLY HERO		
								NO. DAUS.	RECORDS NO.	MILK LBS.	FAT LBS.	RECORDS NO.	MILK LBS.	FAT LBS.
		PENNSYLVANIA	1	3	11687	3.6	422	1	12	13130	500	3	13777	528
		DELAWARE	1	1	4700	4.1	193	1	9	12870	494	1	12644	463
1048678	MAINE		2	2	12710	3.9	487	1	13	9640	432	1	11565	486
	NEW HAMPSHIRE		1	1	13470	3.9	524	1	2	13860	508			
	MASSACHUSETTS		35	57	13713	3.9	533	34	116	14183	546	2	13576	522
	CONNECTICUT		1	1	8610	3.7	321	1	34	9270	336	1	10017	370
	NEW YORK		3	7	11145	4.0	438							
	NEW JERSEY		94	172	12018	3.8	451	50	40	12592	463	1	12226	455
	PENNSYLVANIA		1	1	12360	3.4	419	1	9	12790	461	1	13189	483
	MARYLAND		1	1	12820	3.9	499	1	139	12130	491	1	13058	508
	VIRGINIA		3	4	14228	3.5	495	3	43	14032	531	1	10678	539
1081971	MASSACHUSETTS		11	12	14969	3.8	565	11	109	14262	548	1	13255	510
	CONNECTICUT		1	3	16590	4.1	686	1	46	15400	571	2	15124	574
	NEW JERSEY		36	59	12384	3.7	465	12	51	11908	447	1	11278	430
	PENNSYLVANIA		1	1	10010	3.7	375	1	20	9130	361	1	10017	427
	VIRGINIA		1	1	19010	4.7	888	1	16	15840	639	1	16296	639
1112498	NEW JERSEY		13	15	11102	3.8	424	12	52	11672	432	1	11595	424
1124920	MASSACHUSETTS		1	1	11140	3.7	415	1	147	14200	559	1	14606	555
	NEW JERSEY		6	9	12220	3.7	448	3	93	13750	496	1	12866	470
	DELAWARE		1	1	11610	3.2	377	1	5	11980	435	1	10802	397
1129309	MASSACHUSETTS		1	1	10920	3.7	405	1	94	14930	564	1	13832	534
	NEW JERSEY		44	81	11651	3.7	430	16	34	12441	468	1	12153	452
	VIRGINIA		4	8	13543	3.5	480	2	13	14419	556	2	14127	556
1148207	MASSACHUSETTS		7	15	13760	3.6	499	7	102	14025	537	2	13319	512
	NEW YORK		1	1	12520	3.5	434							
	NEW JERSEY		26	35	11044	3.8	414	8	58	11519	431	1	10425	393
	DELAWARE		1	1	8570	4.5	382	1	7	12490	445	1	10987	389
	VIRGINIA		1	1	14550	4.1	594	1	29	15790	620	1	15979	627
1154817	MAINE		3	7	11093	4.1	454	3	6	12023	496	2	11173	445
	MASSACHUSETTS		15	18	14214	3.8	532	15	125	14811	569	1	14062	537
	CONNECTICUT		1	2	17680	3.4	593	1	5	17895	673	2	15827	583
	NEW YORK		2	4	12875	3.5	447	1	33	11960	428	1	12470	446
	NEW JERSEY		91	149	12754	3.8	477	63	28	12770	475	1	12388	463
	PENNSYLVANIA		2	4	12987	3.8	492	2	18	9883	404	2	10069	407
	NORTH CAROLINA		1	1	12370	3.6	442							
1183665	MAINE		2	3	11518	3.9	445	2	9	12053	483	1	11696	459
	NEW HAMPSHIRE		1	1	13520	3.5	475	1	12	13860	502	1	14508	540
	MASSACHUSETTS		22	29	15234	3.7	558	22	105	14585	558	1	13957	534
	NEW YORK		3	5	12438	3.7	452							
	NEW JERSEY		222	324	12804	3.7	476	176	27	12844	479	1	12195	459
	PENNSYLVANIA		2	2	8990	3.7	331	2	13	10755	377	1	9723	346
	MARYLAND		1	1	11530	3.8	438	1	32	8080	309	1	9091	348
	VIRGINIA		2	3	14133	3.7	514	1	24	15330	589			
1183734	NEW JERSEY		2	2	11835	4.2	483	2	26	12980	498	1	13827	526
	PENNSYLVANIA		1	1	11250	4.1	464	1	14	10870	433	1	11183	431
1204052	MASSACHUSETTS		15	18	15352	3.5	541	15	98	14310	543	1	14051	537
	CONNECTICUT		2	4	16827	3.8	641	2	10	16739	606	2	15955	596
	NEW YORK		2	2	14010	3.2	450							
	NEW JERSEY		55	71	12746	3.6	449	44	35	12970	483	1	12080	453
	PENNSYLVANIA		1	1	13830	3.4	467	1	27	11700	415	1	14105	504
	VIRGINIA		2	2	10490	3.8	399	2	62	15065	603	1	14399	536
	NORTH CAROLINA		1	2	11490	3.5	402	1	13	12985	464	2	15429	547
1206797	MASSACHUSETTS		7	13	14975	3.7	543	7	103	15144	574	2	14260	543
	CONNECTICUT		1	2	16825	3.8	635	1	22	15920	609	2	15686	597
	NEW JERSEY		57	79	13336	3.8	500	47	32	12631	468	1	12367	461
1211325	MASSACHUSETTS		14	18	14949	3.4	515	13	121	14943	571	1	14291	545
	NEW YORK		3	3	11380	3.7	427	2	3	12335	463	1	13309	494
	NEW JERSEY		27	31	13523	3.6	488	25	16	12437	467	1	12647	467
	VIRGINIA		1	1	14530	3.4	494	1	82	13830	527			
1222748	MASSACHUSETTS		1	1	19630	4.0	791	1	151	14610	577	1	14606	555
	NEW JERSEY		9	13	11364	4.1	462	8	37	12048	445	1	11402	423
1252367	NEW JERSEY		3	4	11127	4.0	440	3	15	13430	511	1	13687	512
JER. 410437	NEW JERSEY		7	31	8164	5.4	439							
	PENNSYLVANIA		1	2	4645	5.6	258							
	DELAWARE		1	1	7100	4.9	350							
491255	NEW JERSEY		5	11	8867	4.7	404							
	MARYLAND		1	1	8930	5.6	496							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
									NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
	B. S.	79624	NEW JERSEY	9	18	11392	4.3	481							
			VIRGINIA	1	1	14370	4.2	605							
			NORTH CAROLINA	2	2	9510	4.1	389	2	32	7105	294	1	7761	319
002	HOL.	1145788	NEW YORK	1	1	15980	3.6	580	1	29	13660	487	1	13734	479
			OHIO	1	1	15680	3.8	593	1	5	14820	543	1	14072	521
			INDIANA	79	115	13066	3.8	493	69	9	13602	519	1	13302	506
			ILLINOIS	4	8	17346	4.0	685	3	11	14377	557	2	15806	594
			MICHIGAN	2	2	10510	3.8	403	2	9	13245	486	1	15195	555
			WISCONSIN	4	7	10700	3.6	376	4	14	11378	409	2	11482	409
			IOWA	5	7	13248	3.9	511	5	7	12670	467	1	12029	452
			MARYLAND	2	3	14378	3.9	550	2	45	12473	457	1	13026	486
			SOUTH CAROLINA	2	2	14235	3.8	531	2	5	14290	495			
			GEORGIA	2	3	14158	3.6	508	2	20	12918	470	1	11946	445
			KENTUCKY	1	1	8770	3.7	321	1	3	14150	572			
			TEXAS	1	1	12600	3.7	465	1	85	11880	409			
003	GUER	215116	NEW JERSEY	3	9	7691	5.0	384					1	9287	444
		218621	NEW YORK	1	3	11547	4.1	463							
			NEW JERSEY	19	33	7626	4.5	340							
			DELAWARE	1	3	8330	4.3	354							
			ARIZONA	1	3	11170	4.5	508							
		219604	NEW YORK	1	2	10035	4.4	439							
			NEW JERSEY	22	40	8692	4.7	408							
		223294	NEW JERSEY	2	4	6945	4.9	338							
		234360	NEW JERSEY	4	6	6319	5.2	320							
		237383	NEW JERSEY	2	9	9828	4.9	478							
			PENNSYLVANIA	1	1	5380	4.2	224							
		244132	CONNECTICUT	18	76	7813	4.4	344	2	13	8358	396	2	8279	398
			NEW JERSEY	2	7	9749	4.2	408							
			PENNSYLVANIA	1	8	7041	4.7	327							
		252553	NEW JERSEY	8	14	10124	4.4	437							
		258560	NEW JERSEY	6	23	8132	4.7	379							
			NORTH CAROLINA	1	1	8240	4.9	402							
		258981	NEW JERSEY	25	58	8565	4.4	376							
			PENNSYLVANIA	1	1	9610	4.0	386							
		261884	CONNECTICUT	1	2	8705	5.1	440							
			NEW YORK	1	1	10980	4.9	535							
			NEW JERSEY	29	69	8377	4.6	387	2	5	9641	437	3	9272	429
			PENNSYLVANIA	2	3	9408	5.0	466	1	2	8070	394	1	8676	419
			FLORIDA	1	2	8890	4.3	377							
			MISSISSIPPI	1	2	7340	5.4	383	1	40	7435	358	1	6420	317
			TEXAS	1	4	9895	4.5	445							
		262384	NEW JERSEY	5	14	9359	4.6	428							
			PENNSYLVANIA	1	4	13365	4.2	555	1	13	11155	519	1	8785	449
			WISCONSIN	1	1	4890	5.6	276							
		265561	NEW JERSEY	8	17	7575	4.8	357							
		275036	NEW HAMPSHIRE	1	1	7170	5.0	357							
			NEW JERSEY	14	22	9277	4.8	446	3	19	10390	501	1	9058	429
			TEXAS	2	2	9100	4.3	374	1	34	8830	411			
		275969	NEW JERSEY	20	51	8623	4.4	373							
			PENNSYLVANIA	1	3	6803	5.0	331							
			VIRGINIA	1	3	10100	4.4	449							
		282759	NEW YORK	2	2	6330	4.9	309							
			NEW JERSEY	47	111	7779	4.9	376							
			PENNSYLVANIA	3	6	7432	4.5	333							
			MARYLAND	1	1	8170	4.9	404							
			NORTH CAROLINA	1	1	6700	5.3	356							
		283109	NEW YORK	3	3	7857	5.1	393							
			NEW JERSEY	182	412	7862	5.2	408	20	17	9624	449	2	9474	430
			PENNSYLVANIA	5	18	8384	5.0	416	5	26	8688	417	3	8646	421
			MARYLAND	1	2	10865	4.8	516							
		283865	NEW JERSEY	3	10	8583	4.5	386							
			INDIANA	1	4	11353	4.3	488	1	4	11628	563	2	10492	512
		290572	NEW JERSEY	12	30	8315	4.6	379							
			PENNSYLVANIA	1	1	10290	4.2	429							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAS.	CONTEMPORARY NO. RECORDS	MILK LB.	FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
		294214	NEW JERSEY	51	148	8700	4.8	419	6	12	8961	414	2	9643	406
			PENNSYLVANIA	2	6	8967	4.8	429	1	9	8073	358			
			MARYLAND	2	2	8205	4.7	380							
			NORTH CAROLINA	1	3	9417	4.5	424							
		295016	NEW JERSEY	4	23	8153	4.7	379							
		295265	MASSACHUSETTS	1	1	7180	4.9	355							
			NEW JERSEY	1	1	6510	4.4	287							
			PENNSYLVANIA	2	7	7405	5.1	374							
		305489	NEW JERSEY	1	3	7047	4.4	309							
		305490	NEW JERSEY	4	13	8397	4.5	374							
			MARYLAND	1	3	7187	4.5	325							
		308878	NEW JERSEY	5	10	7246	4.8	348							
		309603	NEW JERSEY	2	7	9085	4.4	399							
			PENNSYLVANIA	1	5	7868	4.8	378	1	6	8002	369	2	7488	380
		312803	NEW JERSEY	1	2	6770	5.0	338							
		312960	CONNECTICUT	1	2	7470	4.8	359	1	67	10560	513	1	12546	619
			NEW JERSEY	19	64	8470	4.9	411	3	4	10800	551	4	9208	428
			PENNSYLVANIA	3	19	9479	5.2	486	2	6	8236	396	3	8390	447
			NORTH CAROLINA	1	3	9410	4.6	429							
		320873	NEW HAMPSHIRE	1	5	7836	4.7	369	1	6	7278	346	3	7906	377
			NEW JERSEY	5	17	6410	4.7	300							
			PENNSYLVANIA	1	6	7693	4.7	363	1	7	8518	387	2	8878	394
		324192	MASSACHUSETTS	5	14	7047	4.7	327	3	84	11739	456	1	11249	451
			NEW JERSEY	11	25	8176	4.7	385	1	1	8947	479	1	8219	403
			PENNSYLVANIA	1	6	7828	5.0	392	1	8	8693	404	2	7946	386
		330720	NEW JERSEY	52	92	7946	5.1	401	11	10	10027	451	2	9946	429
			PENNSYLVANIA	11	26	7621	5.2	396	9	19	10259	498	4	9542	448
			MARYLAND	1	1	7290	4.9	355	1	8	9490	442			
		333965	MASSACHUSETTS	6	12	6924	4.9	337	1	102	11823	458	3	11503	456
			NEW JERSEY	17	41	8491	4.6	389							
		336990	NEW HAMPSHIRE	1	3	6013	4.5	272	1	6	7440	352	1	7565	360
			CONNECTICUT	1	2	8450	5.3	444							
			NEW YORK	1	2	8560	4.8	411	1	5	8920	408	1	8055	393
			NEW JERSEY	70	131	8300	4.9	405	15	27	10259	498	1	9742	448
			INDIANA	3	10	10720	4.8	510	3	16	11313	532	3	10227	489
			MARYLAND	1	2	9845	4.9	473	1	19	9920	506	2	8464	425
			NORTH CAROLINA	1	2	10360	3.9	402							
			MISSISSIPPI	1	3	6713	5.0	340	1	26	7280	355	1	6420	317
			TEXAS	2	2	6905	4.3	300	1	112	10880	442			
		349256	NEW JERSEY	19	56	7988	4.6	367	1	2	7665	354	2	10072	407
		358614	MASSACHUSETTS	1	1	7300	4.9	355							
			NEW JERSEY	2	7	9587	4.7	452							
		362356	NEW JERSEY	4	4	8038	5.1	408	4	15	9348	430	1	9884	432
		363826	NEW YORK	2	2	6360	4.2	264							
			NEW JERSEY	108	217	8010	5.0	396	16	21	9660	442	1	9812	417
			PENNSYLVANIA	3	9	8172	4.9	404	2	11	7820	371	3	7719	362
		371263	NEW JERSEY	18	44	8651	4.6	399	3	4	8986	444	3	8012	352
		381020	NEW JERSEY	5	11	6697	5.1	341							
			PENNSYLVANIA	1	1	6270	4.9	309	1	8	7460	351			
		387879	NEW JERSEY	5	9	7861	5.1	400							
		406702	NEW JERSEY	5	20	8896	5.0	439	2	7	9846	422	1	10126	419
			MARYLAND	1	1	7010	3.9	275							
		414145	NEW YORK	1	4	8358	4.7	390							
			NEW JERSEY	27	52	8255	4.8	398	9	17	9284	434	2	9473	432
			PENNSYLVANIA	1	3	10893	4.8	520	1	30	8807	443	2	9047	396
		417207	NEW JERSEY	4	7	8133	5.0	405							
			PENNSYLVANIA	1	6	8023	4.6	376	1	23	8125	385	3	8378	397
		431323	CONNECTICUT	3	9	11521	5.0	580	2	31	10847	537	3	11663	588
			NEW YORK	1	3	6810	5.7	390							
			NEW JERSEY	15	29	8326	5.3	435	4	17	9181	472			
			INDIANA	1	1	8360	5.6	466							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.			
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	
		MINNESOTA	1	4	8960	5.6	501	1	21	8428	405	2	9227	460	
		MARYLAND	1	1	6030	4.8	289								
		SOUTH CAROLINA	1	1	9140	4.5	409								
		TEXAS	1	3	7173	4.9	339	1	16	9567	461	1	5799	278	
	435369	NEW JERSEY	5	7	6769	5.2	354	1	9	7870	345	2	9015	393	
	437966	NEW JERSEY	14	15	7821	4.8	374	6	23	9533	423	1	9990	435	
	438329	NEW JERSEY	7	11	7779	5.0	388	3	13	9407	411	1	11162	466	
		PENNSYLVANIA	1	2	11610	5.0	577	1	15	10250	542	1	9145	486	
	445235	NEW JERSEY	3	4	7738	5.1	396	3	18	10178	452	1	10061	440	
	446627	NEW JERSEY	1	1	8840	4.4	388	1	4	8510	422	1	9581	391	
		PENNSYLVANIA	1	3	7557	5.6	422	1	22	8170	391	3	8531	416	
	452438	NEW JERSEY	26	44	7893	4.9	390	8	28	9585	417	2	10502	463	
		PENNSYLVANIA	1	3	8717	4.7	408								
	453191	NEW JERSEY	2	2	7610	4.7	359					1	8077	355	
	473982	NEW JERSEY	44	59	8863	4.7	410	21	20	9779	432	1	10283	446	
	478224	NEW JERSEY	7	8	8456	5.0	424	6	16	8920	427	1	10326	456	
	483625	NEW JERSEY	5	5	8266	4.9	406	5	19	10748	429	1	11399	442	
	488743	NEW JERSEY	14	33	9378	5.1	473	8	36	9546	433	2	10162	464	
		PENNSYLVANIA	1	1	11200	5.2	582								
	507027	NEW JERSEY	3	3	10150	4.6	463	3	16	10490	467	1	10664	464	
HOL.	654594	NEW JERSEY	28	115	11411	3.8	434								
		PENNSYLVANIA	3	5	10017	3.7	364								
		VIRGINIA	2	16	11797	4.1	475								
	658978	NEW HAMPSHIRE	1	2	9155	3.5	318								
		RHODE ISLAND	1	4	12140	3.9	474								
	669224	NEW JERSEY	55	168	12127	3.5	425								
	673525	MAINE	2	17	16166	3.5	563	2	20	15402	578	4	15079	598	
		MASSACHUSETTS	3	9	11770	4.1	475	1	75	11787	455	3	11503	456	
		NEW YORK	1	1	6740	4.0	268								
		NEW JERSEY	96	354	11704	3.8	440	4	18	12744	492	2	12184	461	
		MICHIGAN	2	2	8275	3.7	302								
		WISCONSIN	1	1	11620	3.9	449								
		VIRGINIA	2	7	14517	3.8	543					1	14737	577	
	675837	NEW YORK	1	1	7610	3.2	243								
		NEW JERSEY	60	175	10483	3.6	378								
	675839	NEW JERSEY	33	135	11151	3.6	395								
	679129	NEW JERSEY	15	66	12107	3.5	421								
	715512	NEW YORK	1	3	16733	3.3	561								
		NEW JERSEY	27	90	11988	3.5	424	1	3	13280	465				
		PENNSYLVANIA	1	6	13978	3.8	532	1	9	12876	490	2	13124	503	
	718303	NEW JERSEY	22	83	11267	3.5	414								
	726064	NEW JERSEY	6	16	10977	3.7	394								
	748439	CONNECTICUT	1	1	10890	3.5	377								
		NEW JERSEY	124	419	11958	3.6	431	1	3	15300	573	1	13309	501	
	748442	NEW JERSEY	27	110	11284	3.7	418								
	755659	CONNECTICUT	1	4	10980	3.9	422								
		NEW JERSEY	16	75	10399	3.6	372								
	763008	MASSACHUSETTS	2	5	11614	3.9	447								
		NEW JERSEY	50	158	11343	3.8	427								
		ILLINOIS	1	3	11577	4.2	491								
	765514	NEW JERSEY	12	33	11105	3.6	403								
	770146	MASSACHUSETTS	8	18	12166	3.8	464	2	59	11778	462	1	11522	457	
		NEW JERSEY	11	32	11075	3.6	400								
		PENNSYLVANIA	1	1	10440	3.6	372								
	779715	NEW JERSEY	2	10	9471	3.4	317								
		WEST VIRGINIA	1	11	15092	3.8	575								

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY NO. RECORDS	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
	780214	NEW JERSEY	17	52	10965	3.6	388							
	780230	NEW HAMPSHIRE	1	1	12810	3.4	432							
		MASSACHUSETTS	5	11	11508	3.7	428							
		NEW YORK	1	1	7530	3.8	289							
		NEW JERSEY	70	218	11484	3.7	423	1	30	13290	505	1	12502	464
		PENNSYLVANIA	1	4	11010	3.7	402							
		OHIO	1	1	11580	3.6	417							
	805332	NEW YORK	1	1	15060	3.5	525							
		NEW JERSEY	67	187	11213	3.7	415	3	10	13002	479	3	12980	477
		PENNSYLVANIA	1	4	11918	3.7	440	1	4	11800	399			
	811743	NEW YORK	1	4	15810	3.4	541					1	14421	517
		NEW JERSEY	341	834	11506	3.6	416	55	28	12470	468	2	12389	461
		PENNSYLVANIA	16	39	12030	3.6	439	14	14	11146	425	2	11837	460
		IOWA	1	1	16500	3.7	618	1	4	10960	369			
		MARYLAND	1	1	11180	3.2	359	1	6	10020	368	1	10715	390
		NORTH CAROLINA	1	3	8047	3.7	293	1	4	7350	256	2	8214	286
	812635	MASSACHUSETTS	16	35	13049	3.7	474	14	31	13634	478	2	15745	562
		NEW JERSEY	23	92	11485	3.8	436							
	818179	NEW JERSEY	5	10	9146	3.6	322							
	818313	NEW JERSEY	15	33	11656	3.4	393							
		PENNSYLVANIA	1	6	14517	3.6	517							
	822064	NEW JERSEY	1	6	11192	3.6	406							
		ILLINOIS	32	86	10660	3.8	403	27	7	12290	454	3	12043	443
	826471	NEW JERSEY	17	60	12535	3.8	478	4	49	12920	465	2	12952	474
		PENNSYLVANIA	1	5	12452	4.0	495	1	11	9678	420	2	9679	421
	845357	NEW JERSEY	2	6	12553	3.5	433							
	851096	NEW JERSEY	27	111	11960	3.7	445							
		WISCONSIN	1	6	13018	3.8	492	1	5	14037	497	1	13560	475
	854060	MASSACHUSETTS	3	14	13159	3.8	503	3	100	12529	482	3	12017	471
		NEW JERSEY	36	110	12800	3.8	486	8	24	13340	504	2	12794	489
		DELAWARE	1	5	14284	3.4	488	1	6	11533	412	4	12023	433
		MARYLAND	1	1	13100	4.4	578							
		VIRGINIA	1	2	11695	3.8	436							
	854210	VERMONT	4	7	14515	3.6	518	1	15	12360	472	2	12920	490
		CONNECTICUT	2	4	17034	3.7	630	2	17	12704	473	2	13138	485
		NEW YORK	9	14	11818	3.7	432	1	32	12220	456	1	11881	456
		NEW JERSEY	871	2295	12223	3.8	457	137	23	12628	473	2	12665	476
		PENNSYLVANIA	31	108	12103	3.8	458	25	11	11999	443	3	11599	431
		IOWA	1	1	11040	3.6	400							
		MARYLAND	4	9	11593	3.7	419	2	8	11048	463	2	9909	378
		VIRGINIA	2	5	12304	4.0	484							
		NORTH CAROLINA	1	1	8630	3.4	295	1	26	8780	347	1	8960	344
		GEORGIA	1	1	14400	3.5	503	1	14	12750	463			
		WASHINGTON	1	1	11580	3.5	410							
	866148	NEW JERSEY	120	318	12067	3.6	433	20	15	12392	465	2	12646	472
		PENNSYLVANIA	1	3	9683	3.6	352	1	5	8380	339			
		DELAWARE	2	6	9154	3.8	348	2	6	11412	436	3	11445	408
	867523	NEW YORK	1	1	14910	4.0	596							
		NEW JERSEY	162	625	12026	3.6	437	14	15	12580	466	2	12450	468
		PENNSYLVANIA	1	5	14276	3.5	504	1	6	12943	459	2	13615	499
		MARYLAND	1	5	9538	3.6	332	1	5	9346	320	2	8268	302
	884334	NEW JERSEY	45	123	11031	3.9	428	6	24	13578	516	2	13130	492
		PENNSYLVANIA	1	3	9547	3.9	372	1	3	9717	354	2	9391	343
	884838	MAINE	2	5	13015	3.6	473	1	28	13340	632	1	12382	476
		NEW HAMPSHIRE	86	219	10827	3.8	406	59	12	11446	430	3	10799	405
		VERMONT	58	128	10993	3.9	428	6	12	13538	522	3	12874	510
		MASSACHUSETTS	8	22	10821	3.9	419	7	46	12121	458	2	12745	478
		RHODE ISLAND	2	3	16545	3.9	640	1	17	12155	431	1	10922	390
		CONNECTICUT	3	6	15611	4.0	615	3	22	15511	578	2	14172	571
		NEW YORK	5	7	13193	3.6	476							
		NEW JERSEY	55	81	11858	3.9	453	29	19	13148	488	1	12400	464
		PENNSYLVANIA	4	8	9883	3.7	360	2	25	11170	426	1	12132	468
		DELAWARE	1	1	9930	3.1	311	1	5	8450	377	1	7815	288
	887814	MASSACHUSETTS	2	9	12308	4.1	504	2	102	12212	472	3	11867	469
		NEW JERSEY	4	7	10106	3.8	381							
	893550	MASSACHUSETTS	2	3	11825	4.4	514							
		CONNECTICUT	1	1	18830	3.3	613							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. OAS.	RECORDS ND.	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
		NEW JERSEY	42	129	11519	3.9	442	4	16	12860	480	2	12878	483
	899573	NEW JERSEY	10	29	11550	3.8	432	1	4	13540	523	4	10584	426
		PENNSYLVANIA	1	1	15020	3.4	517							
	910448	NEW JERSEY	50	108	12649	3.6	449	12	12	12840	493	2	12421	474
	910774	VERMONT	4	4	12305	3.7	458	3	9	12817	480	1	12764	479
		MASSACHUSETTS	4	10	11512	3.9	451	3	103	12341	482	2	11760	465
		NEW YDRK	13	22	12633	3.8	474	6	15	12381	463	2	13482	518
		NEW JERSEY	607	1110	11910	3.8	452	262	27	12603	470	1	12395	463
		PENNSYLVANIA	21	37	11884	3.8	440	16	15	11848	444	2	12600	474
		OHIO	1	1	18090	3.2	576	1	2	11940	380			
		ILLINDIS	1	1	12740	4.2	536							
		MARYLAND	1	1	3680	3.4	127	1	23	9080	354	1	9995	384
		VIRGINIA	5	9	11349	3.9	449	1	3	13595	525	1	14399	564
		WEST VIRGINIA	1	4	10063	3.4	349							
	933930	NEW YDRK	8	9	11914	4.0	468	4	15	12680	487	1	12339	460
		NEW JERSEY	753	1418	12039	3.7	447	291	31	12483	467	2	12290	459
		PENNSYLVANIA	17	43	10839	3.7	401	16	16	11166	416	2	11248	421
		NORTH DAKOTA	1	1	10810	3.3	360							
		DELAWARE	1	1	10190	3.6	369	1	2	10770	366	1	9080	336
		MARYLAND	4	9	12971	3.6	470	3	26	11891	444	3	12207	453
		VIRGINIA	3	4	12298	3.7	438	1	8	13540	518	1	13200	497
		NORTH CAROLINA	2	2	14285	4.1	579	1	28	16020	619	1	14257	536
	949139	VERMONT	2	3	13913	3.7	503	1	15	12600	482	2	13053	493
		MASSACHUSETTS	1	1	14740	4.3	640	1	33	15330	594			
		NEW YDRK	2	2	10960	3.9	425	1	17	12550	472			
		NEW JERSEY	164	230	12342	3.7	460	127	38	12260	454	1	12137	448
	972497	NEW YDRK	1	1	11990	3.8	452							
		NEW JERSEY	17	45	11710	3.7	434	3	13	9673	330	1	12012	448
	972498	NEW YORK	1	1	10600	3.2	341							
		NEW JERSEY	6	24	12103	3.7	450							
	999938	MAINE	4	11	9820	3.6	350	3	7	10870	430	3	10878	428
		NEW HAMPSHIRE	1	1	15150	3.5	530	1	8	14540	537			
		VERMONT	2	4	11594	3.6	418	1	15	10510	375	1	11521	420
		MASSACHUSETTS	37	83	12800	3.8	480	37	112	13452	518	2	12738	495
		CONNECTICUT	1	1	10070	3.8	380	1	30	10460	385	1	10976	408
		NEW YORK	16	28	11969	3.6	432	4	19	12830	488	1	14661	564
		NEW JERSEY	258	435	11695	3.6	425	151	35	12300	454	1	12106	447
		PENNSYLVANIA	4	10	11852	3.7	439	4	15	10620	414	2	10103	396
		ILLINDIS	1	1	16640	3.4	565	1	9	14070	530			
		WISCONSIN	1	1	9700	3.3	316	1	15	13340	555			
		DELAWARE	1	1	9280	4.0	368	1	4	11920	423	1	10802	397
		MARYLAND	1	2	9725	3.7	357	1	4	11620	504	1	11707	462
		VIRGINIA	3	9	12414	3.7	459	1	2	13125	511	1	12306	483
	1010692	NEW JERSEY	25	50	11560	3.6	410	2	17	12618	507	2	11868	455
	1024878	NEW JERSEY	20	50	13047	3.7	483	7	15	13372	509	2	12518	473
	1029933	NEW JERSEY	24	80	12045	3.6	435	7	49	12308	456	2	12023	446
	1030634	RHODE ISLAND	7	13	14299	3.7	527	7	9	12418	477	2	11829	455
		NEW JERSEY	34	75	12060	3.8	456	18	40	12146	453	1	12137	444
	1030635	NEW YORK	1	2	11710	4.3	496	1	6	12575	454	1	13342	496
		NEW JERSEY	89	142	11596	3.7	423	32	29	12281	456	1	12511	466
		PENNSYLVANIA	20	45	10963	3.7	398	19	10	11192	450	2	10830	413
		MARYLAND	1	2	12910	3.9	488	1	12	11880	443	2	12328	460
		WEST VIRGINIA	1	1	10970	3.9	424	1	14	13280	474	1	11336	410
	1041009	NEW YORK	1	1	13530	3.7	502	1	20	13320	493	1	12611	483
		NEW JERSEY	73	92	13462	3.6	478	60	29	12613	467	1	12339	457
		PENNSYLVANIA	1	1	10400	3.6	379	1	13	12770	482			
	1070978	MASSACHUSETTS	8	22	15239	3.9	593	8	114	13295	509	3	12555	489
		NEW JERSEY	68	146	12169	3.7	456	16	25	12143	461	2	11817	444
		PENNSYLVANIA	1	5	14212	3.9	555	1	18	11614	453	5	11445	441
		DELAWARE	2	4	11943	3.7	439	2	4	10505	381	2	11285	405
		MARYLAND	1	1	12420	4.2	516	1	8	10340	373	1	12241	460
		VIRGINIA	3	11	13990	4.3	608	1	26	14780	586	1	13309	529
	1091298	RHODE ISLAND	1	2	14670	3.5	516	1	2	10480	399	2	11696	446
		NEW YDRK	5	5	13690	3.7	509	4	15	12840	482			
		NEW JERSEY	314	446	13385	3.7	490	209	27	12546	470	1	12378	462
		PENNSYLVANIA	7	13	13576	3.5	472	7	19	11684	430	2	13279	492
		VIRGINIA	1	1	14660	4.0	583	1	7	14170	542	1	11968	449
		NORTH CAROLINA	1	1	8930	4.1	369	1	6	9290	347			

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERO			
								NO. DAUS.	NO. NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	AV. LB.
	1105318	MASSACHUSETTS	17	21	14586	4.0	579	17	125	14752	567	1	14313	544	
		NEW YORK	1	2	13195	4.4	577	1	21	14215	501	2	13756	493	
		NEW JERSEY	20	23	12705	4.0	504	19	22	12680	485	1	12815	489	
		PENNSYLVANIA	1	1	12740	4.3	552	1	8	12960	467				
		VIRGINIA	3	3	13930	3.7	512	3	72	14180	536	1	10813	567	
	1134627	VERMONT	1	3	7377	3.8	277								
		NEW JERSEY	77	143	11133	3.6	403	22	20	12329	458	2	12110	448	
		PENNSYLVANIA	2	2	10735	3.6	385	2	22	11000	418	1	9984	422	
		MARYLAND	1	3	9287	3.6	332	1	8	12580	430	2	11925	415	
	1148994	NEW JERSEY	8	9	11333	3.7	412	8	48	11604	434	1	11226	429	
	1167632	MASSACHUSETTS	4	4	12613	3.8	473	4	3	11893	475	1	13857	528	
		CONNECTICUT	2	2	15165	3.9	592	2	39	14400	594	1	14726	611	
		NEW YORK	1	1	12860	4.1	523	1	24	12310	448	1	13015	464	
		NEW JERSEY	99	115	13154	3.7	488	94	42	12338	462	1	12287	458	
	1169225	NEW JERSEY	62	97	13073	3.7	479	37	34	13008	489	1	12468	468	
		PENNSYLVANIA	1	1	15460	4.0	621	1	18	11560	449	1	12470	481	
	1206615	CONNECTICUT	2	2	14095	3.8	531	2	15	13945	525	1	14132	525	
		NEW JERSEY	34	35	12091	3.6	439	34	42	12211	453	1	12115	443	
	1206617	NEW YORK	1	1	17560	3.5	623	1	42	14030	529	1	14661	564	
		NEW JERSEY	52	60	12957	3.9	510	51	39	12347	469	1	11983	452	
		PENNSYLVANIA	1	1	15340	3.9	595	1	6	11740	450	1	13287	497	
		VIRGINIA	1	1	13610	3.8	520	1	66	16230	688	1	11249	434	
	1212623	NEW YORK	2	2	13665	3.9	529	2	37	13960	533	1	14650	565	
		NEW JERSEY	184	252	12355	3.7	460	137	32	12409	463	1	12305	461	
		PENNSYLVANIA	1	2	8245	3.5	282	1	7	16395	584	2	15271	558	
		NORTH CAROLINA	1	1	7330	3.6	264	1	6	9550	364				
	1213933	NEW JERSEY	92	119	11632	3.6	417	85	50	11921	439	1	11941	438	
	1230960	VERMONT	1	1	8780	4.4	389	1	15	12870	485				
		NEW JERSEY	54	70	11209	3.9	434	50	41	12399	456	1	12098	448	
		MARYLAND	1	1	12860	4.1	530	1	5	10640	383				
	1233752	VERMONT	1	1	13890	3.9	545	1	15	12660	470	1	12840	481	
		NEW JERSEY	84	99	12219	3.7	454	66	39	12543	461	1	12537	458	
		MARYLAND	1	3	14403	3.8	543	1	37	11655	431	3	10035	366	
	1272569	NEW JERSEY	3	3	12277	3.4	421	3	33	9843	361	1	11470	419	
	1273434	NEW JERSEY	2	2	13190	4.0	510	2	12	12740	479	1	11510	428	
JER.	355637	NEW JERSEY	6	13	7546	5.3	403								
		INDIANA	1	1	7790	5.5	428								
	362579	NEW JERSEY	3	14	7407	5.6	414								
	376040	IDAHO	1	3	9183	4.6	415	1	1	10267	536				
	383932	NEW JERSEY	16	58	7424	5.0	369								
	411483	NEW JERSEY	10	17	6334	5.3	332								
		PENNSYLVANIA	3	6	7428	5.1	384								
	428734	NEW JERSEY	2	3	8115	5.4	437								
		ILLINOIS	1	1	9400	4.9	464								
		WISCONSIN	1	4	10208	4.7	463	1	5	8298	455	3	7932	434	
	432138	NEW YORK	2	3	9743	5.1	497								
		NEW JERSEY	15	44	8478	5.1	421								
		PENNSYLVANIA	1	2	9350	5.6	522								
	434878	NEW YORK	1	3	6690	5.3	354								
		NEW JERSEY	22	67	7828	5.1	394								
		PENNSYLVANIA	2	12	8042	5.0	405								
	462273	NEW JERSEY	21	55	8132	5.1	410	1	39	10010	546				
		OHIO	1	2	7815	4.5	346								
		MARYLAND	9	16	7274	5.1	371								
		TENNESSEE	1	3	6197	4.9	306								
	482805	NEW JERSEY	1	1	6890	5.5	378								
	482807	NEW YORK	3	14	10716	5.3	554	1	3	8936	393	2	8609	451	
		NEW JERSEY	53	112	9259	5.1	470	17	26	9505	479	1	8982	462	
		MARYLAND	2	4	10273	5.4	546								
	488734	NEW JERSEY	2	5	7503	5.5	405					1	11892	443	
		PENNSYLVANIA	4	14	7768	5.5	422								

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. DAUS.	RECORDS ND.	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
	494610	NEW JERSEY	1	3	8017	5.1	408							
	497573	NEW JERSEY	7	7	9070	5.0	445	5	7	9666	470	1	9792	462
	516407	NEW JERSEY	1	2	7050	5.0	347							
	522492	NEW JERSEY	2	3	8425	5.4	446					1	11423	424
	522893	NEW JERSEY	3	7	9409	4.5	428	2	14	8488	409	2	8964	445
	538715	NEW JERSEY PENNSYLVANIA	2 1	2 2	10885 5185	4.7 4.4	510 228					1	5799	270
	541436	NEW JERSEY PENNSYLVANIA	10 1	16 1	10594 7160	4.7 4.2	491 301	10 1	14 19	9808 5880	475 295	1 1	10034 6071	497 306
B.S.	37398	NEW YORK	1	2	8445	4.1	340							
		NEW JERSEY	9	29	10318	3.8	392							
	45878	NEW JERSEY	26	96	10674	3.7	389	1	23	9960	424	1	10562	443
		NORTH CAROLINA	2	2	8385	3.6	299	2	28	9230	369	1	8889	353
		WYOMING	1	5	12090	3.9	474	1	11	12944	543			
	52529	NEW JERSEY	5	10	8169	4.0	330							
	57994	NEW HAMPSHIRE	1	1	8140	3.8	310							
		NEW YORK	2	2	9125	4.1	373							
		NEW JERSEY	31	103	10197	4.2	426							
		NORTH CAROLINA	4	5	8883	4.3	378							
	69048	NEW YORK	1	5	13206	4.1	544					1	11194	474
		NEW JERSEY	21	64	10616	4.1	431	4	5	12131	505	3	11176	480
		PENNSYLVANIA	2	5	10011	4.7	468							
		NORTH CAROLINA	6	13	8237	4.1	336	3	16	8928	352	2	9257	371
	77870	CONNECTICUT	1	3	7007	4.3	295	1	5	8103	317	1	7957	292
		NEW JERSEY	10	38	11587	4.2	488	2	3	10846	466	3	10571	442
		NORTH CAROLINA	2	2	10510	4.0	419	1	21	8060	326			
	82585	MASSACHUSETTS	1	2	9270	4.2	382							
		NEW YORK	1	1	11960	4.2	498							
		NEW JERSEY	50	97	9719	4.3	417	19	14	9969	408	1	10730	443
		MARYLAND	1	1	12420	4.1	514	1	3	8910	381	1	9461	386
		VIRGINIA	1	2	14710	4.0	591	1	26	10980	460			
		NORTH CAROLINA	1	1	9540	4.1	393	1	26	9750	390			
	84113	NEW JERSEY	2	3	9400	4.4	411	1	22	10960	473	1	10366	449
		NORTH CAROLINA	1	1	5350	4.5	241							
	86139	VERMONT	2	3	9355	4.5	413	1	5	9540	375	1	9080	350
		MASSACHUSETTS	4	9	10380	3.9	407	4	19	11030	453	2	11072	455
		CONNECTICUT	1	3	11543	4.1	474	1	20	12107	495	3	11964	490
		NEW YORK	9	21	10670	4.2	437	4	15	11684	472	2	11649	478
		NEW JERSEY	116	211	9444	4.3	399	26	16	10102	414	1	10618	444
		PENNSYLVANIA	3	9	12336	4.2	519	2	5	10263	411	4	10672	449
		OHIO	1	2	12520	4.7	579							
		WISCONSIN	1	2	7635	4.3	524	1	4	10025	405	2	9658	400
		DELAWARE	4	4	11778	4.0	475					1	13196	507
		MARYLAND	8	11	9629	4.0	387	1	6	9510	402	1	10480	402
		VIRGINIA	2	2	8875	4.5	396	1	45	11180	487	1	11412	487
		NORTH CAROLINA	3	6	8268	4.2	341	2	17	8269	345	2	9173	362
		OREGON	2	3	12230	4.7	581	2	28	11005	480	1	10110	435
	86674	NEW JERSEY	23	46	9226	4.3	398	3	12	11537	474	1	11238	491
	87015	MASSACHUSETTS	1	2	9875	4.2	409	1	11	11735	470	2	11064	454
		NEW JERSEY	13	28	10875	4.0	435	3	11	10147	423	2	10909	456
		DELAWARE	1	1	8620	4.0	342					1	13320	511
	87138	NEW YORK	1	1	11230	4.2	473							
		NEW JERSEY	24	53	10441	4.1	425	4	23	11063	460	2	10253	429
		NORTH CAROLINA	1	2	6610	4.6	300							
	103408	NEW YORK	2	3	11150	4.5	504	2	61	12265	521	2	11096	472
		NEW JERSEY	20	29	11102	4.1	460	6	17	9693	392	1	9164	376
		PENNSYLVANIA	1	1	8790	4.1	360							
		ILLINOIS	1	1	11110	4.8	533							
		GEORGIA	1	1	8770	3.8	333	1	2	8150	325			
	119565	NEW JERSEY	2	2	10240	4.2	432	2	26	10580	418			
		MARYLAND	1	2	8790	4.0	349					1	11074	447
004 GUER	267773	NEW JERSEY	3	8	6412	4.9	511							

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY NO. RECORDS	MILK LB.	AV. FAT LB.	YEARLY HERD NO.	MILK LB.	AV. FAT LB.
	356919	NEW JERSEY	19	64	7610	4.9	368	1	1	10600	500			
HDL.	726054	NEW JERSEY MARYLAND	20 1	58 4	10732 11975	3.7 3.4	394 407							
B.S.	54730	NEW JERSEY	4	11	8077	4.2	338							
005 GUER	276772	NEW JERSEY PENNSYLVANIA	12 1	26 1	9176 6180	4.2 4.3	387 263	1 1	10 15	7590 8700	351 413	1	7652	365
006 GUER	213554	NEW JERSEY	26	82	8313	4.8	396	2	13	10375	424	4	10012	445
	253178	NEW JERSEY PENNSYLVANIA	52 2	114 9	8036 9117	4.9 4.4	391 399	1	6	10301	403	4	10729	427
	262485	NEW JERSEY PENNSYLVANIA VIRGINIA	6 1 1	16 4 5	7761 9765 9680	4.9 4.8 4.5	378 471 440	1	9	8708	419	2	8350	401
	282352	NEW JERSEY	10	23	8615	4.9	419							
	295802	NEW JERSEY PENNSYLVANIA	10 1	19 3	6740 7923	5.1 5.1	341 399							
	318289	NEW JERSEY	2	4	8410	4.7	394							
	323514	NEW JERSEY PENNSYLVANIA	21 4	47 5	8073 7188	4.6 4.6	372 338	1 2	4 24	9590 7945	457 355	1 1	8884 8453	438 398
	336228	NEW JERSEY	45	100	7999	4.8	379	1	15	8060	346	1	9723	427
	343683	NEW JERSEY PENNSYLVANIA ILLINDIS	15 1 1	30 1 1	7966 5260 7030	4.8 4.5 5.5	378 238 384	3 1	12 14	8812 8180	368 404	1	9331	396
	350208	NEW JERSEY	6	18	8430	4.7	395							
	390915	NEW JERSEY PENNSYLVANIA	4 1	13 3	10737 6997	4.8 4.8	510 336	1 1	3 21	9348 8887	450 374	1 2	8949 11178	421 408
	393390	NEW JERSEY	7	10	8370	5.0	420	1	38	10185	471			
	426173	NEW JERSEY PENNSYLVANIA	18 1	39 1	7730 5280	5.1 5.8	392 305	4	6	9704	439	3	8730	421
	431395	NEW JERSEY	32	66	7732	4.8	371	7	4	9562	449	2	8760	397
	444846	NEW JERSEY	1	1	8210	4.7	384	1	3	8520	429	1	9581	391
HDL.	675841	MASSACHUSETTS NEW JERSEY	1 2	1 3	12350 8893	3.9 3.9	477 347							
	710957	NEW JERSEY	10	30	11270	3.5	394							
	782794	NEW JERSEY PENNSYLVANIA	50 1	151 2	11514 10870	3.5 3.6	401 386	1	32	11520	406	1	11750	425
	839500	NEW JERSEY PENNSYLVANIA	20 1	69 1	11899 5930	3.5 4.2	413 247							
	870302	NEW JERSEY	57	178	12155	3.5	429	4	16	11780	431	1	12004	436
	913381	NEW YORR NEW JERSEY PENNSYLVANIA VIRGINIA	1 104 3 1	4 267 7 2	12178 11566 11419 12035	4.0 3.5 3.6 3.6	479 406 412 434	18 3	34 7	12171 13805	435 500	2 2	12285 12694	444 461
	957416	NEW JERSEY PENNSYLVANIA	94 4	232 6	10984 12753	3.7 3.8	406 475	9 4	29 12	10816 14286	408 525	1 2	10894 13002	407 478
	966978	NEW JERSEY VIRGINIA	7 1	18 1	11387 8830	3.6 3.6	410 316	1	171	11340	395	1	10660	378
	992792	NEW JERSLY	8	18	10848	3.9	416	1	1	12270	513	2	12644	492
	1004259	NEW JERSEY PENNSYLVANIA	47 1	92 1	11066 13940	3.6 3.6	390 503	13 1	42 8	11257 13660	408 530	2 1	11367 14192	416 529
	1034471	NEW JERSEY PENNSYLVANIA	61 1	107 1	11417 15440	3.7 3.8	427 588	18 1	33 10	12072 14220	434 523	1 1	11923 12786	434 468
	1069770	NEW JERSEY NORTH CAROLINA	7 1	14 1	12849 10850	3.6 3.7	458 401	3 1	17 34	12958 11110	462 387	2 1	12148 10562	446 371

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		1094515	NEW JERSEY	27	43	10799	3.8	409	14	50	10893	397	2	11155	411
		1141530	NEW JERSEY	7	9	10018	3.6	362	3	25	9650	350	1	9472	345
		1176154	NEW JERSEY	2	2	13670	3.6	495	2	11	11805	464	1	11118	453
	JER.	415159	NEW JERSEY NORTH CAROLINA	7 1	19 1	7179 10610	5.6 4.8	398 510							
		471951	NEW JERSEY PENNSYLVANIA	3 1	6 2	9878 7145	5.1 5.3	502 375							
		501902	NEW YORK NEW JERSEY	5 5	6 11	14838 10078	4.5 4.9	619 492	5 1	23 4	8492 9980	443 532	1 1	10342 9036	541 472
		516406	NEW JERSEY	3	4	7455	5.3	394							
	B.S.	48671	NEW JERSEY PENNSYLVANIA WISCONSIN	8 1 1	30 2 1	11261 7810 13290	3.8 4.1 3.4	423 320 450							
		83585	INDIANA	2	4	11588	4.7	539	2	8	11305	491	2	10972	485
		84650	NEW YORK NEW JERSEY	1 5	1 8	14200 12398	4.4 4.3	629 526							
007	GUER	174644	NEW JERSEY	43	136	7482	5.0	370							
		229711	NEW JERSEY PENNSYLVANIA TENNESSEE	47 1 1	149 1 1	7497 4890 5430	4.8 4.1 4.1	361 202 221							
		275061	MASSACHUSETTS NEW YORK NEW JERSEY PENNSYLVANIA MINNESOTA MARYLAND SOUTH CAROLINA	1 1 10 3 1 1 1	1 2 25 5 3 1 1	7090 9490 8113 7394 8753 6990 8240	4.6 5.1 5.0 5.1 5.0 4.5 5.3	322 482 403 369 438 313 436							
		277694	NEW JERSEY	21	68	8325	4.9	405							
		303820	NEW JERSEY PENNSYLVANIA MARYLAND	2 4 4	6 10 29	7483 8515 8248	4.7 4.8 4.7	346 408 388	1 1	3 12	10350 8852 8390	488 422 416	1 3 6	8884 8665 9276	438 408 455
		315761	NEW JERSEY	2	5	6998	5.0	340							
	HOL.	724277	VERMONT NEW JERSEY	1 4	1 13	14270 11445	3.0 3.5	434 404							
		772932	NEW JERSEY PENNSYLVANIA	14 1	43 2	9872 10405	4.0 3.3	390 335							
		830746	NEW JERSEY	5	14	9441	4.3	396							
		866139	NEW JERSEY	8	31	10796	3.6	392							
008	GUER	269462	NEW JERSEY	9	24	7588	4.9	369							
	HOL.	791296	NEW JERSEY	2	6	12124	3.2	385							
	JER.	438172	NEW YORK NEW JERSEY	1 2	9 6	7920 8427	5.1 5.8	403 492							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY RECORDS NO.	AV. MILK LB.	FAT LB.	YEARLY RECORDS NO.	MILK LB.	AV. FAT LB.
000	GUER	288068	PENNSYLVANIA	4	6	6732	5.3	347	4	7	8877	397	2	9112	411
		409762	PENNSYLVANIA	2	5	6218	5.4	335	1	11	10068	370	1	10519	376
		418392	PENNSYLVANIA	2	9	8249	4.7	389	2	9	7915	351	3	8236	374
	HOL.	800240	PENNSYLVANIA	1	3	10217	3.8	391	1	21	9653	365	2	10295	393
	JER.	472800	PENNSYLVANIA	2	2	7440	5.2	384	1	1	7040	316			
		527622	MISSOURI	3	3	8937	5.3	467					1	8393	450
001	HOL.	1009371	PENNSYLVANIA	50	72	13506	3.9	522	47	15	12582	484	1	13508	524
			ILLINOIS	4	5	12174	3.9	471	4	12	11956	439	1	14246	543
			VIRGINIA	1	1	10910	3.8	409	1	20	15370	528			
		1009372	VERMONT	4	4	14678	3.5	544	1	9	10290	396	1	11176	424
			PENNSYLVANIA	47	65	14271	3.9	557	47	14	12910	501	1	13457	519
			ILLINOIS	1	3	13573	3.3	441	1	11	12973	480	2	15478	537
			MARYLAND	3	3	13880	3.8	508	3	12	13087	487	1	12851	487
		1156771	CONNECTICUT	16	21	13710	3.9	530	16	23	14290	528	1	15135	566
			PENNSYLVANIA	21	25	13874	3.9	540	20	20	12784	491	1	13398	518
			MICHIGAN	2	2	14475	4.5	647	2	25	14300	532	1	15053	561
		1156775	PENNSYLVANIA	6	7	17177	4.0	690	6	11	15768	591	1	15375	580
			VIRGINIA	1	1	11540	4.0	458	1	20	15330	526			
		1156777	PENNSYLVANIA	3	3	9507	3.8	357	3	3	9680	345	1	10780	389
		1261857	PENNSYLVANIA	10	12	18107	3.8	687	10	17	17197	667	1	16313	632
002	GUER	209799	PENNSYLVANIA	9	37	8080	4.8	391	2	6	8270	392	4	8589	400
		227122	PENNSYLVANIA	21	61	7510	4.9	368	3	7	9308	438	2	8132	396
		231376	PENNSYLVANIA	6	15	6835	5.2	352	1	4	7406	343			
		267200	PENNSYLVANIA	73	181	7317	4.7	345	24	7	9400	392	2	9220	395
		277462	PENNSYLVANIA	1	6	8167	4.6	378	1	5	11518	482			
		281258	PENNSYLVANIA	1	1	9530	4.4	423							
		287054	PENNSYLVANIA	1	4	7398	4.7	348							
		290511	PENNSYLVANIA	10	25	7839	5.2	404	3	9	8398	424	1	7270	364
		295672	PENNSYLVANIA	3	8	8730	4.5	389	1	5	9800	406			
		306512	PENNSYLVANIA	101	251	7715	5.0	385	81	9	8792	390	2	8911	403
		311576	NEW YORK	1	1	9590	4.3	409							
			PENNSYLVANIA	55	142	7339	4.9	356	20	10	8915	380	2	8723	380
		315797	PENNSYLVANIA	4	6	7400	4.9	361	1	8	8115	403	1	8475	388
		322436	PENNSYLVANIA	10	26	7948	4.8	375	6	11	8371	357	2	8870	386
		328527	PENNSYLVANIA	11	31	6946	5.1	349	10	9	8079	355	2	8607	379
		329091	PENNSYLVANIA	3	4	7332	4.7	340							
		336538	PENNSYLVANIA	56	122	7832	4.6	359	55	12	8940	380	2	9186	397
		341581	PENNSYLVANIA	52	182	8058	4.7	374	17	5	9014	410	3	9127	422
		348989	PENNSYLVANIA	58	136	7332	4.8	356	37	8	9217	403	2	8729	395
		353465	PENNSYLVANIA	15	36	8164	4.9	396	8	11	9075	384	1	9015	396
			MARYLAND	1	7	9367	4.7	439	1	11	8601	419	3	8408	424
		366062	PENNSYLVANIA	72	152	7444	4.6	338	58	9	9209	394	2	8914	390
		378581	PENNSYLVANIA	93	198	7466	4.8	355	84	10	8982	385	2	9077	397
		380572	PENNSYLVANIA	185	372	8367	4.3	360	182	10	9065	381	2	9273	398
			MARYLAND	2	8	9558	4.2	401	1	9	8663	393	2	8524	392
		382950	PENNSYLVANIA	74	196	7231	4.7	338	35	7	8865	381	2	8713	380
		385457	PENNSYLVANIA	21	63	7325	4.9	358	10	8	9599	415	2	9683	420

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY NO. NO.	AV. MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
	387217	PENNSYLVANIA ALABAMA	32 1	88 1	7582 10770	4.7 4.0	357 435	18	8	8678	384	2	9095	401
	388430	PENNSYLVANIA MARYLAND	172 1	422 1	7790 5320	4.6 5.5	355 295	153 1	9 16	9174 6760	397 323	2	9377	409
	390080	PENNSYLVANIA	45	88	6734	4.8	323	43	10	9005	383	2	9289	404
	401814	PENNSYLVANIA	17	23	6968	4.6	323	17	14	9188	396	1	10128	438
	401978	PENNSYLVANIA	8	18	7031	4.9	345	8	11	8545	392	2	9494	423
	409794	PENNSYLVANIA	27	51	6950	4.7	325	26	8	9199	398	2	8844	392
	437855	PENNSYLVANIA	81	157	6877	4.7	325	79	11	9047	390	2	8877	393
	439905	PENNSYLVANIA	75	145	7495	4.4	329	74	11	9337	394	2	9263	395
	452905	PENNSYLVANIA	15	29	7529	4.7	356	15	9	9124	401	2	8925	405
	482386	PENNSYLVANIA	12	24	6767	5.1	343	12	11	9413	401	2	9070	402
	504275	PENNSYLVANIA	23	38	7010	4.9	342	22	12	8798	359	2	10295	428
	505472	PENNSYLVANIA	26	42	7338	4.7	346	26	13	9196	375	2	9553	405
	510975	PENNSYLVANIA	13	17	8293	4.5	370	13	10	9947	390	1	10058	414
	524427	PENNSYLVANIA	4	4	5075	4.8	245	3	10	8333	331	1	11421	463
	526027	PENNSYLVANIA	3	3	6743	5.2	356	3	6	7450	344	1	9843	434
HOL.	698848	PENNSYLVANIA ILLINOIS DELAWARE	51 1 1	117 1 1	10547 12340 12080	3.7 3.2 3.3	387 395 393	30	12	11520	432	2	11588	432
	728151	PENNSYLVANIA	20	85	11913	3.7	436	3	5	12437	473	5	11642	447
	734362	PENNSYLVANIA MINNESOTA	126 2	356 2	10938 11205	3.7 3.7	401 410	57 1	9 25	11248 13690	420 468	2 1	11206 13614	419 483
	741318	NEW YORK PENNSYLVANIA MINNESOTA MARYLAND VIRGINIA WEST VIRGINIA	2 1295 1 9 2 1	2 3824 1 21 4 4	10895 11685 10610 12955 11629 12235	4.1 3.8 3.5 4.0 3.4 3.8	444 436 367 515 391 464	2 909 9	12 10 35	10235 11516 13306	354 429 533	1 2 2	11276 11704 11700	409 435 464
	780887	PENNSYLVANIA	26	87	10724	3.7	398	12	9	11119	412	2	10729	401
	781607	NEW YORK PENNSYLVANIA DELAWARE	3 619 1	5 1704 3	9962 11014 11137	3.6 3.7 3.8	361 408 423	443 1	9 8	11325 11580	423 410	2 2	11331 12644	422 454
	792696	PENNSYLVANIA	37	101	10749	3.6	383	13	8	11997	439	2	11717	430
	805968	PENNSYLVANIA	63	195	9967	3.8	383	21	8	11392	423	3	11190	416
	806572	PENNSYLVANIA	70	174	10880	3.7	402	45	10	11459	433	2	11503	431
	809813	NEW JERSEY PENNSYLVANIA	1 154	1 479	12540 11016	3.6 3.6	446 399	59	8	11548	424	2	11628	430
	815030	PENNSYLVANIA MARYLAND	56 1	228 5	11362 11184	3.7 3.6	417 406	28	8	11479	430	2	11270	425
	818478	PENNSYLVANIA MINNESOTA	20 1	72 1	11532 13350	3.5 3.6	402 405	7 1	5 13	11623 10140	439 383	2 1	11390 12372	418 460
	818651	PENNSYLVANIA	32	82	9698	3.5	340	5	5	10426	370	1	11882	426
	834149	PENNSYLVANIA DELAWARE MARYLAND	479 1 1	1318 3 2	11300 13927 13820	3.7 3.4 3.1	421 471 423	321 1 1	9 14 7	11210 12583 12400	419 443 434	2 3 1	11336 12971 12677	424 453 471
	853261	PENNSYLVANIA	27	67	11311	3.6	408	6	6	11732	426	2	11439	425
	855693	PENNSYLVANIA	14	47	12884	3.6	457	4	6	11491	434	1	11718	426
	868940	PENNSYLVANIA VIRGINIA	50 1	150 6	12210 7873	3.5 3.2	424 250	14	5	11386	425	1	11617	423
	870701	NEW YORK PENNSYLVANIA MARYLAND	2 438 1	2 910 1	8730 11579 12470	3.7 3.7 3.6	322 421 448	2 434 1	20 13 6	11130 11465 12080	398 429 449	1 2 1	10927 11733 13745	396 437 526

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERO		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
	875095	PENNSYLVANIA	9	31	11517	3.4	391	2	5	11426	404	4	13664	502
	876045	NEW YORK	4	4	9863	3.8	371	4	19	11170	399	1	10892	394
		PENNSYLVANIA	530	1321	11214	3.7	418	478	12	11458	425	2	11713	435
	879983	PENNSYLVANIA	486	983	11398	3.7	420	472	13	11601	431	2	11808	440
		MARYLAND	2	2	12625	3.4	429	1	15	9250	350			
	889260	PENNSYLVANIA	309	884	10918	3.6	387	116	8	11469	425	2	11510	428
	892877	NEW JERSEY	1	3	12087	3.5	423							
		PENNSYLVANIA	320	703	10778	3.6	387	250	10	11209	419	2	11214	419
	901240	NEW YORK	1	1	12290	3.2	394							
		PENNSYLVANIA	91	267	10472	3.7	389	41	9	11283	413	2	10991	404
	911901	PENNSYLVANIA	274	581	10756	3.9	415	261	11	11616	434	2	11453	430
	913432	PENNSYLVANIA	101	377	11702	3.9	456	51	8	11585	435	2	11511	438
		WEST VIRGINIA	3	6	12990	4.8	633							
	933357	PENNSYLVANIA	388	863	12004	3.7	439	355	10	11496	428	2	11817	439
		MARYLAND	1	1	18110	3.8	685	1	13	15800	648	1	15380	601
	939765	NEW YORK	1	1	13380	3.7	492	1	19	10880	385	1	10998	398
		PENNSYLVANIA	1056	2268	11383	3.8	427	957	12	11617	432	2	11858	442
		DELAWARE	1	4	11928	3.4	406	1	6	10350	367	3	9938	337
		MARYLAND	16	23	13884	4.0	553	16	48	15017	599	1	13670	548
	946961	NEW YORK	1	1	14010	3.5	485					1	11630	461
		PENNSYLVANIA	619	1390	10694	3.8	402	484	10	11312	422	2	11386	426
		DELAWARE	1	1	15320	3.3	507	1	27	11140	421	1	9505	428
		MARYLAND	1	5	11282	4.1	460	1	10	12604	453	4	11761	423
	955467	NEW YORK	1	1	8530	3.6	306	1	21	11090	400	1	10856	393
		PENNSYLVANIA	333	498	10785	3.7	396	331	14	11611	431	1	12123	451
		DELAWARE	1	3	11867	3.3	389	1	11	11745	395	3	10155	343
	975138	NEW YORK	20	22	13831	3.6	492	18	16	12937	474	1	12089	447
		PENNSYLVANIA	1145	1905	12998	3.6	468	1133	13	11823	439	2	12497	463
		MARYLAND	26	41	16472	3.9	645	25	42	14754	586	1	13786	551
	980386	PENNSYLVANIA	78	276	10940	3.8	417	51	8	11236	420	3	11321	427
	992855	PENNSYLVANIA	376	577	12031	3.7	439	373	15	11891	439	2	12409	460
	997478	NEW YORK	1	1	9230	3.2	294	1	5	9800	355	1	11162	404
		PENNSYLVANIA	671	1156	10887	3.7	396	663	13	11832	439	2	12143	451
		MARYLAND	1	2	14065	4.2	595	1	43	13315	477	2	12388	448
	1006317	PENNSYLVANIA	15	41	10415	3.8	398	11	9	10886	411	2	10787	421
	1014608	NEW YORK	1	1	10060	4.1	408	1	19	11050	390	1	10998	398
		PENNSYLVANIA	162	182	12095	3.7	450	161	15	12350	457	1	12965	481
		MARYLAND	1	1	13900	3.9	545	1	29	12500	483	1	12481	484
	1015936	PENNSYLVANIA	167	328	12229	3.7	452	166	12	11840	441	2	12336	460
	1026938	PENNSYLVANIA	210	410	11326	3.8	426	199	13	11645	433	2	11860	445
		WEST VIRGINIA	1	5	12282	3.7	459	1	9	11590	436	2	11276	423
	1039074	NEW YORK	1	1	7990	3.9	310	1	21	11120	400	1	10856	393
		PENNSYLVANIA	364	727	11236	3.7	419	347	12	11560	431	2	11868	444
		VIRGINIA	1	1	8680	3.9	335							
	1046259	NEW YORK	1	1	13700	3.4	467	1	19	10860	387	1	10998	398
		PENNSYLVANIA	646	1234	12059	3.7	443	630	13	11793	440	2	12187	454
		NEW MEXICO	1	2	12735	3.4	439							
	1054246	PENNSYLVANIA	27	76	11137	4.0	442	26	13	11646	433	2	11996	447
	1054251	PENNSYLVANIA	80	220	11870	3.9	462	78	11	11601	434	3	11723	440
	1055398	NEW YORK	1	1	7870	3.6	286	1	5	10070	357	1	11162	404
		PENNSYLVANIA	303	583	10962	3.8	416	298	13	11613	434	2	11879	444
	1056841	NEW YORK	1	1	9360	3.5	325	1	5	9780	349	1	11554	419
		PENNSYLVANIA	86	153	11480	3.8	431	85	10	11651	434	2	11812	441
	1063172	PENNSYLVANIA	78	171	10995	3.8	418	76	12	11815	445	2	12000	450
		MARYLAND	1	3	9630	3.8	362	1	28	12125	451	1	11118	401
	1069614	PENNSYLVANIA	14	23	11505	3.5	403	14	9	11636	446	2	12204	457

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAS.	CONTEMPORARY NO.	AV. MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
	1076799	PENNSYLVANIA	198	388	11286	3.6	405	196	12	11415	424	2	11581	431
		MICHIGAN	1	1	13160	3.3	437	1	12	11150	396	1	11194	395
		WEST VIRGINIA	1	1	10140	3.3	336	1	24	11860	424	1	12884	473
	1078656	PENNSYLVANIA	40	89	11750	3.7	432	40	11	11692	435	2	11928	442
	1090003	PENNSYLVANIA	535	770	12005	3.6	434	526	14	11765	435	1	12314	456
		VIRGINIA	1	2	10300	4.0	412	1	9	11320	392	1	10399	378
	1156447	PENNSYLVANIA	254	364	12222	3.8	466	252	15	11907	443	1	12321	461
	1159161	PENNSYLVANIA	58	58	11668	3.7	432	56	12	11912	438	1	12661	467
	1164957	PENNSYLVANIA	168	292	11493	4.0	463	164	15	12068	444	2	12413	459
		MARYLAND	1	2	13305	4.0	530	1	14	10210	394	2	10410	381
	1167092	PENNSYLVANIA	2	5	13109	3.8	491	2	14	12067	435	3	12759	461
	1167885	PENNSYLVANIA	51	111	11481	3.8	439	51	14	12138	447	2	12431	460
	1170183	PENNSYLVANIA	210	334	11173	3.7	410	209	15	11581	431	2	12196	454
	1203046	PENNSYLVANIA	8	16	12058	3.8	456	7	12	12159	459	2	12931	492
	1203305	PENNSYLVANIA	68	123	11416	3.7	417	67	13	11625	433	2	11783	441
	1204399	PENNSYLVANIA	2	7	8340	3.8	313	2	16	8884	325	3	9632	347
	1266373	PENNSYLVANIA	68	70	11799	3.8	442	68	15	12277	453	1	12738	468
		DELAWARE	1	1	12990	3.4	445	1	7	11010	407	1	10355	392
	1273132	PENNSYLVANIA	39	39	11486	3.7	427	39	18	12504	458	1	13128	480
	1279723	PENNSYLVANIA	32	32	12632	3.9	490	32	13	12523	464	1	12904	482
	1287089	PENNSYLVANIA	1	1	4960	4.2	209					1	15173	610
JER.	427544	NEW JERSEY	1	1	6720	5.0	338							
		PENNSYLVANIA	40	111	7154	5.5	391	7	6	7261	398	1	6978	383
003 GUER	294303	PENNSYLVANIA	23	48	7382	4.7	345	3	12	9078	371	3	9161	377
		ALABAMA	1	1	6470	4.4	286							
	296098	PENNSYLVANIA	3	4	7732	4.9	380	1	9	11850	427	1	10758	409
HOL.	983739	NEW JERSEY	55	114	11753	3.6	423	15	14	12397	458	2	11500	436
		PENNSYLVANIA	3	8	14591	3.7	544	3	16	12156	455	2	12938	475
004 AYR.	55033	MAINE	5	8	8577	4.5	387							
		NEW HAMPSHIRE	10	26	7902	4.4	346							
		VERMONT	7	15	7261	4.2	305	1	17	9704	394	4	9263	379
		MASSACHUSETTS	15	37	8371	4.2	351	2	7	9736	395	4	8858	364
		CONNECTICUT	7	17	8956	4.3	387	1	16	8798	366	1	9254	374
		NEW YORK	2	8	8744	4.2	360							
		PENNSYLVANIA	61	136	8680	4.3	375	43	14	9191	378	2	8930	371
		MARYLAND	1	3	10123	4.5	456							
	64908	PENNSYLVANIA	26	59	7688	4.4	335	14	8	8604	350	1	8252	343
	66566	PENNSYLVANIA	35	95	8598	4.4	377	24	15	8675	372	3	9247	388
		MARYLAND	2	7	9999	3.9	390	2	30	10163	416	3	9098	369
	68482	NEW YORK	1	4	7953	3.9	313							
		PENNSYLVANIA	32	82	8304	4.2	346	15	8	8460	358	1	8145	343
		MARYLAND	1	4	10093	3.9	394	1	27	10053	403	3	8869	358
		COLORADO	1	2	8355	4.3	358							
	73684	CONNECTICUT	1	1	7550	4.2	314	1	1	9010	472			
		NEW YORK	3	6	11454	4.4	503	1	33	10250	418	1	11292	474
		PENNSYLVANIA	48	124	8864	4.3	380	45	16	8995	373	3	9010	374
		OHIO	1	6	7092	4.4	309	1	3	7600	331			
		MARYLAND	1	2	7730	5.0	384	1	13	8430	359	2	8737	373
	77874	NEW YORK	1	4	9210	4.1	376	1	27	9245	377	1	8775	360
		PENNSYLVANIA	17	30	8277	4.2	346	17	13	9107	375	2	9508	387
	77942	CONNECTICUT	1	3	10610	4.0	426							
		NEW YORK	2	4	10605	4.1	432							
		PENNSYLVANIA	88	172	8571	4.1	353	88	14	9501	388	2	9421	386
		DELAWARE	1	2	7060	4.3	303	1	13	8565	322	2	9047	332
	81464	PENNSYLVANIA	10	38	9220	4.3	394	3	18	8946	374	5	9276	384
		OHIO	1	7	8199	4.4	355							
		MARYLAND	1	1	9710	4.8	463							

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
	84629	RHOODE ISLAND PENNSYLVANIA	1 11	1 38	6420 9528	3.5 4.1	227 393	9	16	9193	393	2	8093	345
	85401	PENNSYLVANIA	17	42	8638	4.2	359	14	14	9011	380	1	8527	365
	89376	NEW YORK PENNSYLVANIA DELAWARE NORTH CAROLINA	3 72 4 1	5 108 6 1	10637 8615 8346 10640	4.4 4.2 4.0 4.1	463 364 335 441	2 65 4 1	24 16 23 36	11625 9042 9310 7580	487 367 373 293	2 2 2 1	11631 9267 9415 8720	493 379 378 337
	90489	PENNSYLVANIA DELAWARE MARYLAND FLORIDA	60 13 6 1	74 18 6 1	8653 8056 10810 7440	4.2 4.1 4.4 3.6	366 333 478 270	57 12 5	14 14 9	8891 8799 10154	363 346 413	1 1 1	9419 9418 10166	385 375 420
	91969	PENNSYLVANIA	16	37	8720	4.2	360	16	12	9245	387	2	9253	388
	93478	CONNECTICUT PENNSYLVANIA	1 17	4 36	10618 8896	4.3 4.4	456 387	1 17	5 18	10388 9445	418 387	3 2	9447 9625	386 388
	95808	NEW YORK PENNSYLVANIA MARYLAND	1 17 1	2 23 1	11490 9059 11560	3.9 4.2 4.2	449 382 480	1 16 1	7 14 4	10795 10138 10400	420 411 416	2 1 1	11135 10145 10475	442 411 428
	102607	MAINE VERMONT MASSACHUSETTS CONNECTICUT NEW YORK PENNSYLVANIA	3 10 1 1 1 21	3 14 1 2 1 32	8060 9462 10320 3665 7850 8530	4.5 4.1 4.4 4.0 4.4 4.1	361 388 456 147 345 354	3 7 1 1 1 19	5 12 10 33 52 20	8633 10210 11490 10290 10910 9295	350 388 471 397 442 377	1 1 1 2 1 2	10279 9474 10562 9843 10145 9067	437 378 425 386 411 371
	103230	MASSACHUSETTS NEW YORK PENNSYLVANIA	1 1 13	1 1 20	8700 9940 8797	4.2 4.4 4.0	364 434 351	1 1 12	23 18	9900 8843	412 361	1 1	10715 9635	438 386
	105721	VERMONT MASSACHUSETTS CONNECTICUT NEW YORK PENNSYLVANIA	1 2 1 1 5	2 3 1 1 6	12725 8410 8770 11970 7363	4.2 4.0 3.7 4.4 4.0	529 334 326 523 288	1 2 1 1 5	20 15 19 19 13	11690 11128 9800 11350 8373	461 436 407 481 350	2 1 1 1	11925 10410 9800 8609	467 408 407 360
	106620	VERMONT CONNECTICUT PENNSYLVANIA	1 1 2	1 1 2	12350 6720 7175	3.8 3.8 3.9	470 257 277	1 1 2	37 34 26	10990 8570 7495	458 340 296	1 1 1	11183 9516 7995	458 379 316
	109049	PENNSYLVANIA	12	19	7902	4.3	338	11	20	8503	356	2	9462	388
	110811	PENNSYLVANIA	5	5	9396	4.4	418	5	31	8846	352	1	8517	346
	111321	PENNSYLVANIA	22	28	9281	4.3	399	22	12	9720	397	1	10203	412
	112956	PENNSYLVANIA	7	7	8979	4.3	389	6	12	9180	377	1	9997	409
	113230	PENNSYLVANIA	3	4	8333	4.3	360	3	35	8798	354	1	9661	393
	114520	PENNSYLVANIA	1	1	13080	4.2	551	1	10	9390	396	1	10148	421
GUER	228716	PENNSYLVANIA	60	168	7635	4.7	355	23	10	8384	368	2	8459	376
	253414	NEW JERSEY PENNSYLVANIA	1 42	1 120	9330 7453	4.4 4.7	414 351	1 24	1 15	9120 9502	464 409	1 2	8764 9041	431 397
	278053	NEW YORK PENNSYLVANIA MARYLAND	2 69 1	7 174 4	8029 7140 7790	5.1 4.7 4.6	408 337 349	54 1	13 12	8731 6798	397 338	2 2	8788 7216	402 335
	287309	PENNSYLVANIA	147	296	7459	4.9	363	134	14	8874	409	2	8955	416
	294006	NEW YORK PENNSYLVANIA	1 97	1 240	7620 7772	4.9 4.8	375 370	59	10	8891	389	2	8866	402
	294873	PENNSYLVANIA	14	31	7326	4.9	356	1	21	8971	426	3	8349	392
	295390	NEW JERSEY PENNSYLVANIA FLORIDA	2 293 1	7 777 1	9145 8329 8830	4.7 4.6 4.1	423 384 361	1 204 1	6 12 19	9568 8502 7960	432 395 365	3 2 1	9105 8686 7445	420 405 353
	312989	PENNSYLVANIA DELAWARE	55 1	108 1	7320 6420	4.6 5.1	338 327	47 1	13 16	8883 7650	392 377	2	8816	392
	315580	PENNSYLVANIA	39	105	7915	4.6	363	37	16	8750	396	2	9162	412
	326194	PENNSYLVANIA	55	152	7972	4.7	375	36	15	9283	406	2	9337	404

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LBS.	TEST PCT.	FAT LBS.	305-DAY		CONTEMPORARY		AV.		YEARLY		HERO	AV. FAT
									NO. DAUS.	RECORDS NO.	MILK LBS.	FAT LBS.	RECORDS NO.	MILK LBS.	FAT LBS.			
HOL.		329249	NEW YORK PENNSYLVANIA	1 27	3 80	10343 8042	4.5 4.7	462 377		12	8	8875	401	2	8456	396		
		332293	VERMONT NEW YORK PENNSYLVANIA	1 1 237	1 1 633	11550 8740 7908	4.8 4.9 4.8	553 424 381		183	15	8802	394	2	8697	393		
		333176	NEW JERSEY PENNSYLVANIA	2 31	2 63	6420 6889	4.9 4.8	312 330		8	14	9014	394	2	8956	389		
		342786	NEW JERSEY PENNSYLVANIA MARYLAND	1 99 1	4 331 4	9530 8388 6850	4.7 4.5 5.1	453 379 344		46 1	9 10	9021 6665	410 275	2 2	9162 7107	414 303		
		344451	PENNSYLVANIA	26	65	7586	4.6	341		18	15	8784	384	2	8717	383		
		351345	PENNSYLVANIA	3	7	7066	5.0	353		3	19	8434	372	2	7499	369		
		354504	PENNSYLVANIA	66	111	7193	4.8	343		65	15	8811	400	2	8451	395		
		373766	PENNSYLVANIA	24	50	7673	4.8	362		24	19	8647	388	2	8820	405		
		390448	PENNSYLVANIA	20	51	9104	5.2	478		18	14	9061	433	2	9185	441		
		393013	PENNSYLVANIA	18	34	8280	4.9	399		18	20	9149	404	2	9112	413		
		395100	NEW YORK PENNSYLVANIA	1 35	2 75	7485 7353	4.6 4.6	348 339		24	18	8620	384	2	8563	381		
		395528	NEW YORK PENNSYLVANIA	1 56	3 155	9687 7505	4.8 4.9	460 366		43	11	8742	387	2	8525	384		
		401295	PENNSYLVANIA	53	103	7714	4.9	379		46	14	9362	420	2	8930	405		
		408831	PENNSYLVANIA	38	78	7814	4.7	365		38	14	8759	386	2	8752	388		
		416480	PENNSYLVANIA	23	43	7657	4.8	363		23	18	9093	383	2	9707	410		
		424984	PENNSYLVANIA	45	98	7481	5.0	371		42	17	8455	374	2	9107	407		
		426033	PENNSYLVANIA	35	91	7878	4.8	379		35	16	8722	400	2	9074	417		
		428861	PENNSYLVANIA	4	7	4299	4.8	203		4	25	9043	402	2	7979	352		
		447029	PENNSYLVANIA	27	61	7160	4.7	334		27	15	8451	385	2	8512	392		
		452340	PENNSYLVANIA	1	1	7850	4.6	358		1	9	7360	341					
		472246	PENNSYLVANIA	44	90	7932	4.8	385		44	12	8939	396	2	8665	397		
		473221	VERMONT PENNSYLVANIA	1 42	1 87	7910 7852	5.1 4.9	407 387		1 41	25 15	11160 8386	496 376	1 2	10093 8725	461 395		
		491923	PENNSYLVANIA	9	21	6770	5.1	338		9	20	8453	390	2	8680	408		
		499945	PENNSYLVANIA	15	28	6415	5.1	323		15	17	8350	385	2	8211	392		
		513022	PENNSYLVANIA	5	7	7979	4.8	376		5	29	9891	426	2	10284	459		
		515535	PENNSYLVANIA	1	1	6630	5.3	352		1	10	5930	319	1	7281	371		
		519383	PENNSYLVANIA	4	5	6968	4.9	352		4	14	8651	354	1	10891	451		
		519384	PENNSYLVANIA	3	3	7270	5.5	404		3	15	8187	384	1	9619	434		
		521470	PENNSYLVANIA	2	2	6955	4.2	288		2	5	9465	405	1	9816	430		
		522530	PENNSYLVANIA	3	3	5350	5.2	282		2	11	7630	371	1	9260	456		
		735351	NEW YORK PENNSYLVANIA OHIO WISCONSIN MARYLAND	9 605 1 1 3	24 1770 2 1 13	11738 11219 12620 9850 12201	3.6 3.6 3.3 3.6 3.5	418 401 419 350 442		284	12	11457	426	2	11445	427		
		750349	NEW YORK NEW JERSEY PENNSYLVANIA WISCONSIN MARYLAND	7 4 553 1 1	17 11 1594 1 1	12838 12260 10796 11730 14370	3.7 3.5 3.7 3.4 3.4	468 427 399 398 495		220	10	11244	415	2	11190	416		
	753550	PENNSYLVANIA	38	80	11233	3.6	404		5	9	11098	423	2	12237	451			
	756626	NEW YORK NEW JERSEY	5 4	10 7	12996 11490	3.6 3.7	485 423		1	11	15220	560	1	15925	584			

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		PENNSYLVANIA	818	2099	11155	3.7	412	555	13	11483	428	2	11525	432
		INDIANA	1	1	15820	3.5	553	1	1	8620	346			
		MICHIGAN	1	1	12860	3.3	422							
		VIRGINIA	3	10	12248	3.5	431	2	22	11833	439	2	12116	445
		NORTH CAROLINA	1	1	11620	3.5	406							
		CALIFORNIA	1	1	13820	4.1	561	1	80	16210	599			
776652		NEW JERSEY	1	2	12740	3.3	424							
		PENNSYLVANIA	181	447	10499	3.5	372	101	14	11298	423	2	11146	417
		MARYLAND	1	1	5990	3.7	224							
779723		PENNSYLVANIA	196	563	11198	3.6	395	101	13	11434	424	2	11871	440
789916		NEW YORK	3	5	10209	3.7	382							
		PENNSYLVANIA	245	564	10644	3.7	388	197	14	11323	422	2	11347	422
		MARYLAND	1	2	7130	4.0	284	1	4	9615	357	1	10279	404
		VIRGINIA	2	8	11813	3.6	421							
806124		PENNSYLVANIA	18	69	10388	3.7	381	15	4	10839	390	2	11647	431
824335		NEW YORK	7	11	12893	3.6	464	1	12	14150	522			
		NEW JERSEY	2	3	12505	3.8	460							
		PENNSYLVANIA	640	1773	10984	3.9	423	444	13	11516	428	2	11565	433
		MARYLAND	1	6	12930	3.7	481	1	9	13495	513	4	12257	456
827512		NEW YDRK	10	16	13877	3.6	504	6	7	11988	417	1	12473	426
		NEW JERSEY	3	5	12345	3.3	411	1	8	15395	563	2	15277	559
		PENNSYLVANIA	1226	2563	11340	3.8	429	1126	15	11654	437	2	11924	448
		MICHIGAN	1	2	12020	4.0	484	1	2	15080	577			
		MARYLAND	1	2	12770	3.5	443	1	14	11825	442	2	12704	470
833599		NEW YORK	10	18	12635	3.6	447	2	9	11145	391	2	11712	408
		NEW JERSEY	3	9	11242	3.7	419							
		PENNSYLVANIA	1981	5108	11613	3.7	422	1592	13	11557	432	2	11790	440
		MICHIGAN	1	1	13750	3.3	450							
		DELAWARE	2	5	12552	3.9	482	2	15	11840	452	2	11843	458
		MARYLAND	27	37	13989	3.8	527	24	38	14831	579	1	13822	547
		VIRGINIA	2	5	11634	3.8	441							
		WEST VIRGINIA	1	1	17800	3.5	621							
837231		NEW YDRK	1	5	13300	3.3	436	1	2	12188	463	3	12749	450
		NEW JERSEY	2	3	14965	3.8	562	2	13	10785	391	2	12557	469
		PENNSYLVANIA	227	572	11803	3.7	435	214	15	11780	437	2	11827	443
		MARYLAND	1	1	16060	3.2	509	1	15	14430	515	1	14453	517
839232		NEW YORK	2	2	10620	3.3	353							
		PENNSYLVANIA	58	137	10287	3.6	370	15	12	11269	420	2	11501	430
842933		VERMONT	1	1	11610	3.5	412							
		NEW YORK	1	4	8043	3.5	285							
		PENNSYLVANIA	71	159	10487	4.1	426	55	13	11877	446	2	12011	454
		DELAWARE	1	2	11110	3.9	434	1	22	12380	462	2	10475	399
845699		NEW YORK	2	4	11270	3.4	374							
		PENNSYLVANIA	87	213	10661	3.5	376	23	11	11529	424	2	11460	424
845747		NEW YORK	3	4	13217	3.6	477	3	17	14427	521	2	13222	476
		PENNSYLVANIA	814	1735	11925	3.9	459	800	15	11735	439	2	11962	449
		DELAWARE	2	2	11095	4.1	447	2	6	10605	384	1	11974	456
		MARYLAND	4	5	10951	3.8	415	4	9	9413	341	2	9429	362
		VIRGINIA	2	4	11328	4.2	468	1	9	12585	453	2	11429	416
845968		NEW YORK	2	5	13462	3.5	473							
		NEW JERSEY	1	1	11250	3.4	382							
		PENNSYLVANIA	118	348	11331	3.5	398	61	10	12020	447	2	11955	445
		OHIO	1	3	10603	3.8	402	1	1	13430	580			
854298		NEW YORK	3	8	12055	4.2	501							
		NEW JERSEY	1	1	9010	4.5	406							
		PENNSYLVANIA	437	1144	10626	3.9	412	375	13	11411	425	2	11411	426
		DELAWARE	2	3	10940	3.8	418	1	9	12750	438	2	11920	423
858901		PENNSYLVANIA	12	34	11793	3.5	411	12	14	11718	441	2	12065	443
861104		NEW JERSEY	1	1	14130	3.7	519							
		PENNSYLVANIA	47	147	11322	3.8	425	24	14	12260	458	2	12345	465
867648		NEW YORK	1	4	9835	3.5	348							
		NEW JERSEY	1	1	11450	3.5	396	1	40	11320	419	1	13483	504
		PENNSYLVANIA	181	401	11542	3.7	426	177	13	11467	429	2	11495	430
		MICHIGAN	1	2	15535	3.4	525	1	12	11815	419	1	12448	460
		VIRGINIA	2	5	13515	3.8	508	1	3	13578	505	3	12957	483
896853		NEW YDRK	5	7	11294	3.9	439	1	36	14145	515	2	13462	490
		NEW JERSEY	1	1	13100	3.7	480	1	9	9820	350	1	11500	419

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD			
								NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	AV. LB.
		PENNSYLVANIA	457	912	10575	3.8	399	450	15	11428	428	2	11495	432	
		MARYLAND	1	3	8493	3.5	294								
		VIRGINIA	1	5	13066	3.9	507								
898621		PENNSYLVANIA	87	275	11555	3.6	416	50	14	10955	408	2	10975	411	
909434		NEW YORK	1	2	11705	3.9	457								
		PENNSYLVANIA	57	105	10905	3.7	407	53	17	11721	442	2	11981	453	
928949		NEW YORK	1	2	10850	3.7	400	1	48	13720	505	2	13587	496	
		PENNSYLVANIA	309	621	11191	3.9	432	306	15	11994	448	2	11967	449	
		MARYLAND	3	3	9220	3.8	354	3	17	9543	357	1	13445	514	
931159		NEW JERSEY	1	1	10070	3.4	343								
		PENNSYLVANIA	55	171	10903	3.9	417	34	12	11267	417	2	10988	408	
944336		PENNSYLVANIA	32	65	10267	3.7	379	20	15	11290	412	2	10997	409	
944606		NEW YORK	8	16	14042	3.5	490	5	12	13031	480	1	12878	464	
		PENNSYLVANIA	724	1402	12276	3.7	450	719	16	11905	447	2	12175	458	
		VIRGINIA	1	2	18315	3.6	662	1	22	15800	577	2	14884	545	
		TENNESSEE	12	20	10940	3.7	398								
952335		PENNSYLVANIA	376	772	11464	3.7	427	370	16	11834	445	2	11935	449	
		MARYLAND	1	2	15655	3.8	596	1	17	11170	471	2	10486	465	
		VIRGINIA	19	40	12561	3.8	470	2	25	14633	537	2	13424	496	
		GEORGIA	1	1	24180	3.9	940	1	4	15760	539	1	13331	472	
959002		PENNSYLVANIA	28	86	10509	3.9	405	16	13	11257	419	3	10750	405	
961493		NEW YORK	2	2	13245	3.9	516	2	21	13695	476	1	12525	426	
		PENNSYLVANIA	413	596	11550	4.2	479	412	17	12234	463	1	12031	484	
		MARYLAND	1	1	12030	4.6	549	1	13	12190	444	1	10104	344	
969211		CONNECTICUT	1	3	12943	4.0	521	1	18	14257	531	2	14563	534	
		NEW JERSEY	4	16	12086	3.6	435					3	10370	401	
		PENNSYLVANIA	78	191	10829	3.8	407	60	11	11344	427	2	11330	429	
975893		NEW YORK	2	3	12303	3.7	449	2	22	12215	460	1	13653	496	
		NEW JERSEY	1	1	12350	3.6	445	1	13	9750	352				
		PENNSYLVANIA	183	324	11540	3.8	433	181	16	11815	446	2	12249	462	
		VIRGINIA	1	1	10690	3.7	391	1	36	12680	457				
988502		PENNSYLVANIA	6	13	10552	3.6	384	6	7	9759	361	3	11104	421	
997772		PENNSYLVANIA	9	23	10749	3.5	378	8	21	11690	432	3	11537	429	
1002177		NEW YORK	6	13	12394	3.9	487	5	25	12817	458	2	13366	481	
		NEW JERSEY	2	5	10612	3.9	416	1	62	10830	412	2	10203	410	
		PENNSYLVANIA	437	885	11779	4.0	471	423	15	11927	448	2	12035	454	
		NORTH CAROLINA	1	2	10165	3.6	362	1	7	9025	329	2	7750	297	
1007020		PENNSYLVANIA	1	2	10175	3.6	364	1	17	10400	377				
1014490		NEW YORK	1	2	11730	3.9	452	1	16	13125	460	1	13636	486	
		PENNSYLVANIA	79	167	11572	3.6	414	77	14	11389	429	2	11688	440	
1017139		PENNSYLVANIA	18	25	10647	3.8	402	17	13	11989	453	1	11851	450	
1038489		NEW YORK	13	16	14041	3.7	521	13	13	13419	477	1	13130	462	
		NEW JERSEY	2	2	14075	3.8	533	2	12	14315	518	1	14732	551	
		PENNSYLVANIA	1170	1908	12289	3.8	467	1149	17	12057	454	2	12539	474	
		DELAWARE	1	2	12635	3.6	449	1	20	11685	424	2	11058	417	
		MARYLAND	2	2	13460	3.8	509	2	8	10850	442	1	10104	344	
		NORTH CAROLINA	2	2	8810	4.3	373	2	17	8610	348	1	8998	359	
		GEORGIA	1	2	15200	3.6	541	1	85	9700	357	1	10083	360	
1064716		NEW YORK	1	1	13630	3.5	480	1	21	12030	401				
		PENNSYLVANIA	114	286	12308	3.7	461	112	16	11944	445	2	12088	451	
1064990		NEW YORK	2	3	14708	3.7	538	2	23	11905	438	1	13309	483	
		NEW JERSEY	1	1	13390	3.9	516	1	18	12350	492	1	13069	506	
		PENNSYLVANIA	340	503	12196	3.8	458	335	17	12165	462	1	12743	483	
		MARYLAND	1	1	20640	3.5	722	1	33	16410	695	1	17059	589	
1080777		NEW YORK	5	11	12510	3.5	442	2	25	12065	431	1	13832	501	
		NEW JERSEY	2	3	14665	3.1	453	1	23	12400	469	2	12710	475	
		PENNSYLVANIA	900	1743	11894	3.6	432	890	16	11823	444	2	12062	453	
		DELAWARE	1	2	13610	3.7	497	1	10	15225	535	2	14797	535	
		MARYLAND	3	6	10992	3.6	395	3	15	12620	462	4	12358	452	
		VIRGINIA	4	10	14039	3.6	509	2	5	15361	567	2	14361	521	
1082020		NEW YORK	2	3	14725	3.3	485	2	13	12908	448	2	13446	453	
		PENNSYLVANIA	233	298	13226	3.6	479	230	18	12272	462	1	12815	483	
		MARYLAND	14	15	13962	3.9	544	12	45	14573	577	1	13509	540	

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY NO. RECORDS	MILK LB.	FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
	1084039	NEW YORK	8	14	13131	3.9	513	7	25	13818	511	2	13670	510
		NEW JERSEY	2	3	10965	4.0	434	2	38	10370	383	2	10524	421
		PENNSYLVANIA	593	1042	11897	3.8	450	585	17	11997	453	2	12201	462
		MARYLAND	1	1	12830	3.9	494	1	10	13530	537	1	10529	401
		VIRGINIA	3	4	15855	3.6	589	2	23	15380	578	1	13876	522
		NORTH CAROLINA	1	1	6880	3.9	266	1	6	9630	364	1	8971	335
	1094079	NEW YORK	1	1	12220	4.2	510	1	20	14260	528	1	14595	541
		PENNSYLVANIA	78	78	12715	3.8	481	77	17	12280	471	1	12941	495
		MARYLAND	1	1	14270	3.9	562	1	45	13540	499	1	13723	518
	1149833	NEW YORK	22	29	12998	3.9	501	20	25	13417	503	1	13551	509
		NEW JERSEY	4	7	13088	3.7	482	4	15	13195	500	2	13452	507
		PENNSYLVANIA	1442	2230	12212	3.9	472	1418	16	12080	454	2	12512	472
		MARYLAND	1	3	9627	3.6	343	1	51	12083	413	2	11658	406
	1158050	NEW YORK	6	8	14119	3.4	478	6	13	13914	488	1	12891	456
		NEW JERSEY	1	2	9995	3.8	374							
		PENNSYLVANIA	348	582	12374	3.7	453	338	16	11985	451	2	12445	468
		MARYLAND	3	3	11243	3.6	409	2	43	9375	343			
	1212624	CONNECTICUT	2	2	14610	3.8	547	2	18	14930	577	1	15020	566
		NEW YORK	10	12	11856	3.9	463	7	17	11510	411	1	11439	412
		PENNSYLVANIA	274	454	11769	3.9	459	271	17	12102	455	2	12431	471
		MARYLAND	15	21	15265	4.2	631	15	46	15379	603	1	13811	553
	1230486	NEW YORK	2	2	10590	3.8	391	2	15	12760	445	1	13462	451
		PENNSYLVANIA	249	308	12686	3.6	460	246	17	12134	456	1	12612	476
		MARYLAND	1	1	14720	4.1	600	1	3	12820	505	1	11990	514
	1248311	NEW YORK	4	6	14165	3.8	528	4	28	12644	466	2	13637	526
		PENNSYLVANIA	441	591	11824	3.7	440	433	18	12034	456	1	12544	476
		MARYLAND	1	2	7230	3.4	251	1	19	13815	448	1	17059	589
	1260461	NEW YORK	2	2	14900	3.4	508	2	14	13010	444	1	13462	451
		PENNSYLVANIA	85	86	12170	3.9	479	83	17	13024	498	1	13558	519
	1271019	PENNSYLVANIA	18	18	13497	3.8	517	18	15	12624	488	1	13286	506
	1276888	PENNSYLVANIA	1	1	5120	3.5	181	1	1	6180	222	1	13941	524
JER.	370551	PENNSYLVANIA	9	41	8594	5.3	458	4	16	8278	461	3	8032	447
	380352	PENNSYLVANIA	24	79	8246	5.4	443	12	6	8230	481	2	8354	457
	414190	PENNSYLVANIA	82	234	7641	5.3	404	26	10	7778	430	2	7759	426
	419548	NEW JERSEY	1	2	7870	5.1	399							
		PENNSYLVANIA	44	98	7105	5.2	368	14	12	8011	436	3	7822	435
	425240	PENNSYLVANIA	6	20	7128	5.6	408	3	7	6619	327	1	7085	405
	435154	PENNSYLVANIA	22	45	6826	5.1	347	11	14	8095	437	2	8061	437
	439588	NEW YORK	2	10	6212	5.4	329							
		PENNSYLVANIA	14	31	7921	5.6	444	4	6	8738	480	2	8192	439
	439835	PENNSYLVANIA	21	62	7556	5.3	398	3	8	8437	479	2	8436	467
	453691	PENNSYLVANIA	13	34	8978	5.1	449	1	4	9085	484	1	8219	449
	467212	PENNSYLVANIA	15	22	5638	5.1	283	7	8	7443	399	2	6508	338
	468440	NEW YORK	1	1	8950	4.8	427							
		PENNSYLVANIA	123	276	7463	5.1	381	41	10	7534	406	2	7647	408
	481679	CONNECTICUT	1	1	4930	5.9	293							
		NEW JERSEY	14	37	7281	5.5	401	2	3	9308	455	2	6674	343
		PENNSYLVANIA	55	93	6930	5.5	379	25	16	7673	406	2	7160	386
	482491	PENNSYLVANIA	9	18	6719	5.4	359	1	6	6380	332	1	5548	291
	484019	PENNSYLVANIA	105	262	7486	5.2	393	54	15	7836	424	2	7977	434
	489005	NEW YORK	1	2	6850	5.5	371							
		PENNSYLVANIA	24	64	7439	5.4	400	9	12	8104	427	2	8442	442
	489890	NEW YORK	1	1	6000	6.0	357							
		PENNSYLVANIA	41	107	6980	5.6	390	22	10	8019	419	3	7435	404
		ILLINOIS	1	1	12320	4.7	576	1	9	8780	429	1	8862	440
	506683	PENNSYLVANIA	35	67	6871	5.3	359	11	14	7033	381	1	8338	420
	511765	PENNSYLVANIA	22	47	6290	5.5	345	12	16	7764	406	2	7680	411

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECDROS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	RECORDS NO.	CONTEMPORARY MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.	
005	AYR.	526671	PENNSYLVANIA	33	54	6334	5.4	343	17	15	7151	379	1	7573	414	
		528031	PENNSYLVANIA	16	27	7313	5.4	394	5	10	7771	400	2	7693	407	
		528279	PENNSYLVANIA	1	1	5950	5.6	332	1	17	7240	391	1	7510	407	
		547731	NEW YORK	2	2	7220	5.5	400	1	19	9440	521	1	9341	511	
			PENNSYLVANIA	43	60	6318	5.5	347	28	12	7405	392	1	8327	449	
		549449	PENNSYLVANIA	30	46	7015	5.4	380	17	13	8284	435	1	8428	456	
		554842	NEW YORK	1	1	9120	5.4	491	1	29	9570	502	1	9145	485	
			PENNSYLVANIA	22	35	7614	5.2	396	16	21	7624	403	1	8132	440	
		564731	PENNSYLVANIA	9	12	7232	5.1	365	6	17	7603	419	1	8037	444	
		75818	PENNSYLVANIA	15	26	7947	4.3	337	14	12	9196	371	2	9411	376	
		78214	PENNSYLVANIA	15	23	8320	4.1	340	15	9	9391	376	2	9610	386	
		80167	PENNSYLVANIA	19	32	9134	4.1	375	18	11	9370	378	2	9916	401	
			WEST VIRGINIA	2	2	8345	4.0	335	1	37	7500	301	1	8873	355	
		90131	PENNSYLVANIA	3	3	8460	3.9	328	3	4	8440	352	1	9014	374	
		91298	NEW HAMPSHIRE	1	1	8200	4.4	358	1	24	10400	438	1	8764	348	
	103727	RHODE ISLAND	1	1	5680	4.3	245									
		PENNSYLVANIA	13	23	8660	4.2	362	12	10	9385	384	2	9880	407		
		WEST VIRGINIA	2	2	8185	4.1	337	2	4	9835	403	1	9178	374		
	112107	PENNSYLVANIA	21	27	8131	4.5	361	20	10	9878	407	1	10036	416		
	GUER	228454	PENNSYLVANIA	48	115	7568	5.1	381	11	6	8371	395	2	8479	401	
			VIRGINIA	3	7	7400	5.0	366								
		241871	PENNSYLVANIA	12	37	7015	4.8	333	7	7	7413	358	3	7384	361	
		244147	PENNSYLVANIA	1	1	6120	4.8	296								
		246612	PENNSYLVANIA	49	109	7547	4.8	357	10	7	7720	368	2	8162	381	
			VIRGINIA	1	1	7630	4.6	351								
		262514	PENNSYLVANIA	5	11	7820	4.6	362	1	27	7760	351				
		266471	PENNSYLVANIA	261	627	8096	4.6	374	130	8	8533	391	2	8712	402	
			KENTUCKY	1	1	7450	4.4	328	1	2	9880	502	1	9810	437	
		267408	PENNSYLVANIA	3	3	7877	4.5	353								
			WEST VIRGINIA	1	1	7320	4.3	315								
278267		PENNSYLVANIA	30	68	7461	4.5	330	5	8	8547	397	2	8320	385		
		WEST VIRGINIA	1	4	5810	4.3	251									
281853		PENNSYLVANIA	20	51	7412	4.8	354	8	6	7858	372	2	7800	377		
281901		PENNSYLVANIA	178	466	7488	4.8	357	126	9	8531	390	2	8688	399		
	MARYLAND	1	0	8513	4.7	398	1	5	10397	404	5	9496	393			
	WEST VIRGINIA	1	3	6383	5.0	315										
295238	PENNSYLVANIA	14	34	7251	4.9	357	4	10	8115	362	2	7366	329			
296102	PENNSYLVANIA	29	72	6950	5.1	353	13	8	7558	367	2	7908	391			
299996	PENNSYLVANIA	64	190	7837	4.8	376	21	8	8095	392	2	8373	400			
303912	NEW JERSEY	1	1	13210	4.6	603										
	PENNSYLVANIA	213	463	6915	5.0	347	185	9	8440	388	2	8412	393			
303913	PENNSYLVANIA	24	58	6902	4.9	338	20	9	8105	380	2	8383	389			
308024	PENNSYLVANIA	4	10	7092	5.3	371	1	7	6977	366	3	6794	350			
308658	PENNSYLVANIA	66	172	7764	4.8	368	25	8	8852	401	2	8536	399			
313014	VERMONT	1	1	3830	4.3	164										
	PENNSYLVANIA	272	610	7052	5.0	350	222	11	8327	388	2	8338	392			
	MARYLAND	1	1	8710	6.2	536	1	22	8850	381	1	9232	399			
314367	PENNSYLVANIA	3	12	8276	4.6	388	2	8	7925	374	2	8028	366			
319842	PENNSYLVANIA	16	54	7760	4.7	362	10	7	9031	404	3	8964	398			
322342	PENNSYLVANIA	1	1	11830	3.9	458	1	12	12180	479						

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
328154	PENNSYLVANIA DELAWARE MARYLAND		225	587	6970	5.0	350	110	9	8434	381	2	8425	385
			1	4	7208	5.0	356	1	10	7080	341	1	8088	392
			1	6	7568	5.3	397	1	7	8683	354	4	8298	342
331112	PENNSYLVANIA		15	34	5956	5.2	313	3	8	8008	365	1	8024	371
331756	PENNSYLVANIA		36	93	7577	4.6	349	12	9	8885	411	2	9123	417
331927	PENNSYLVANIA MARYLAND		88	206	7229	5.0	357	58	8	8327	384	2	8441	398
			1	2	6705	5.3	356	1	9	9395	379	2	7968	326
334310	PENNSYLVANIA		69	194	7774	4.6	354	46	10	8419	386	2	8463	381
335596	PENNSYLVANIA		15	39	6756	4.9	332	8	10	8354	383	2	8510	391
336810	PENNSYLVANIA		15	46	8351	4.6	377	10	6	8935	411	2	9384	444
341070	PENNSYLVANIA		76	159	7254	4.8	348	64	11	8654	393	2	8651	396
344094	PENNSYLVANIA MARYLAND		93	169	7049	4.8	340	92	10	8299	381	2	8590	392
			1	3	10127	5.0	505	1	11	11567	460	2	12486	497
345313	PENNSYLVANIA		1	2	8600	4.4	377	1	2	8320	454			
350703	VERMONT PENNSYLVANIA		1	1	8540	4.1	350	1	2	5710	237			
			99	209	7098	4.9	347	60	9	8023	376	2	8180	384
356215	PENNSYLVANIA		5	12	8016	5.0	403	2	14	8089	391	2	9369	441
358718	VERMONT PENNSYLVANIA MARYLAND VIRGINIA WEST VIRGINIA		1	1	5800	5.0	287							
			387	826	7530	5.1	382	317	11	8436	381	2	8718	400
			1	1	7920	5.1	404	1	11	10290	437	1	9788	411
			1	3	7227	4.4	325							
			1	4	7025	5.2	364							
360207	PENNSYLVANIA MARYLAND		94	250	6975	5.1	356	60	12	8703	395	2	8733	407
			1	1	8460	6.2	523	1	12	11570	445	1	12273	489
367829	PENNSYLVANIA WEST VIRGINIA		74	249	7793	4.8	375	40	8	7898	372	2	8168	384
			1	3	7953	4.6	366							
368632	PENNSYLVANIA MARYLAND		47	123	7570	4.7	359	24	9	8798	388	2	8865	402
			2	7	6336	5.1	324	2	9	8133	339	2	7232	302
372034	PENNSYLVANIA		9	28	8016	5.0	405	4	7	8495	401	1	8326	388
375194	VERMONT PENNSYLVANIA MARYLAND		1	1	7820	4.9	386							
			171	404	7100	4.9	342	110	9	8480	388	2	8445	398
			1	1	7190	4.5	320	1	20	8510	355	1	8371	363
378721	PENNSYLVANIA		38	85	6891	5.2	353	11	7	7929	361	1	7754	362
378722	PENNSYLVANIA MARYLAND		258	584	7281	5.0	359	198	10	8327	389	2	8327	395
			1	2	7750	4.6	356	1	8	8610	336	1	7586	315
379863	PENNSYLVANIA MARYLAND		239	516	7322	5.1	373	192	10	8371	383	2	8565	395
			1	4	9108	4.6	419	1	10	10650	441	1	9788	411
382229	PENNSYLVANIA		2	5	8186	4.8	386	2	10	7487	339	3	8275	384
384064	PENNSYLVANIA		34	90	6883	5.0	342	28	10	8776	404	2	8517	393
385031	PENNSYLVANIA		77	125	7055	4.8	341	77	12	8667	385	2	8989	405
413242	PENNSYLVANIA		48	94	7348	5.1	373	42	11	8646	401	2	8742	406
416952	PENNSYLVANIA		42	89	7192	5.0	359	34	13	8141	381	2	8294	390
419915	PENNSYLVANIA		2	2	8125	4.8	391							
419979	PENNSYLVANIA		63	120	7662	4.8	364	55	11	9014	401	2	8923	408
421105	PENNSYLVANIA		104	226	7485	4.9	362	93	12	8593	390	2	8903	411
423734	PENNSYLVANIA		65	179	8513	4.7	398	63	10	8783	407	2	8808	409
423737	PENNSYLVANIA		21	56	7410	4.9	356	20	11	9075	415	2	8689	408
429318	PENNSYLVANIA		18	29	7611	5.2	389	14	10	8807	404	1	8085	370
431713	NEW YORK PENNSYLVANIA		1	1	8620	5.5	473							
			37	81	6896	5.1	349	37	10	8673	402	2	8318	393
432882	PENNSYLVANIA		111	227	7638	4.7	359	110	11	8275	384	2	8499	393

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
	440747	PENNSYLVANIA MARYLAND	199 1	361 1	7958 7710	4.8 4.8	382 367	199 1	13 15	8814 10720	396 458	2 1	9140 9788	417 411
	445925	PENNSYLVANIA MARYLAND	48 1	99 1	7248 6010	5.0 5.8	360 346	48 1	12 21	8710 11090	396 501	2	8758	407
	447754	PENNSYLVANIA	19	31	7369	5.2	378	19	8	8442	391	2	8467	397
	451358	VERMONT PENNSYLVANIA	1 42	1 107	9330 8468	4.4 4.6	408 384	1 42	2 10	5710 8546	237 389	2	8729	409
	457534	NEW YORK PENNSYLVANIA MARYLAND	1 95 1	1 168 1	7870 7021 6940	5.6 4.9 4.4	440 342 302	92 1	11 11	8614 12140	397 482	2 1	8624 10377	405 426
	462008	PENNSYLVANIA	68	118	6930	4.6	321	68	13	8757	398	2	8544	393
	462589	PENNSYLVANIA	26	53	8108	5.0	405	26	10	8623	389	2	9084	418
	463501	PENNSYLVANIA MARYLAND	58 1	92 1	7216 7190	4.7 4.7	339 340	55 1	13 7	8263 11930	378 451	2 1	8047 10747	378 451
	467417	PENNSYLVANIA OHIO MARYLAND	49 1 2	97 3 2	7178 8540 6340	4.8 5.6 5.3	344 480 333	48 1 2	13 13 13	8703 8833 10900	385 414 446	2 1 1	8589 7935 9254	391 371 394
	485517	PENNSYLVANIA MARYLAND	47 1	81 1	6966 6510	4.7 5.1	321 329	46 1	13 18	8523 10750	376 455	2 1	8899 10159	401 451
	490658	PENNSYLVANIA	65	109	6829	4.5	309	65	12	8760	387	2	8472	380
	493849	PENNSYLVANIA	43	81	7400	4.6	337	43	13	8794	384	2	9359	409
	494897	PENNSYLVANIA	36	64	7454	4.6	346	36	15	8827	380	2	9008	396
	511640	PENNSYLVANIA	42	56	6481	4.7	306	41	14	8780	372	1	9299	400
	512660	PENNSYLVANIA	40	52	7928	4.8	378	40	12	8548	382	1	9382	419
	515501	PENNSYLVANIA	26	26	8251	4.6	377	26	12	8464	379	1	9361	419
	520266	PENNSYLVANIA	3	3	6887	4.9	332	3	14	8250	378	1	8270	390
	525396	PENNSYLVANIA	1	1	3870	4.6	178	1	1	11580	412	1	10126	439
HOL.	666928	PENNSYLVANIA	5	13	11143	3.5	385	1	10	12500	451	1	11718	424
	712337	PENNSYLVANIA	5	5	9118	4.5	405	3	9	9913	430	1	9832	419
	727219	PENNSYLVANIA	10	31	11116	3.5	387	4	7	11284	416	2	10992	426
	733976	NEW JERSEY PENNSYLVANIA OHIO MARYLAND WEST VIRGINIA	1 121 1 1 1	1 309 5 1 1	12810 11341 10084 10960 18900	3.7 3.5 3.5 3.1 3.8	470 395 357 345 711	56 1	8 14	11614 11695	421 414	2 3	11478 11034	422 399
	735476	PENNSYLVANIA MARYLAND	206 1	609 2	12440 22820	3.5 3.3	437 742	108 1	9 5	11140 13115	409 444	2 1	11166 10104	412 361
	746074	PENNSYLVANIA MARYLAND	195 1	468 3	10850 7767	3.5 3.5	378 269	77 1	9 5	11239 8170	411 361	2 2	11208 9521	412 400
	746337	PENNSYLVANIA MARYLAND	12 1	23 1	11031 10880	3.6 3.7	395 404	4	8	11483	424	1	9520	375
	767275	PENNSYLVANIA MARYLAND WEST VIRGINIA	324 1 1	806 2 1	10821 9850 7730	3.7 4.7 3.4	394 462 264	153	9	11234	418	2	11122	414
	790131	PENNSYLVANIA	59	162	11987	3.6	429	34	9	11278	412	3	11745	432
	798623	PENNSYLVANIA	124	295	11295	3.6	407	70	9	11249	421	2	10800	406
	800245	NEW YORK PENNSYLVANIA OHIO MARYLAND WEST VIRGINIA ALABAMA	1 702 1 6 5 1	1 1680 2 9 14 2	14540 11208 9640 10177 10071 8995	3.2 3.8 3.5 4.1 3.8 3.5	461 424 337 418 384 315	663 1 6	11 4 12	11157 11780 8748	413 424 352	2 1 1	11232 12110 9895	419 428 403
	800249	PENNSYLVANIA	3	4	11173	3.6	404	1	9	15340	570			
	807508	PENNSYLVANIA	32	65	10941	3.8	417	23	7	10690	409	2	10726	410

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY NO.	MILK LB.	FAT LB.	AV. YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
	814452	PENNSYLVANIA	140	325	11264	3.6	405	125	11	11154	414	2	11045	412
		MARYLAND	1	1	8640	4.1	357							
		WEST VIRGINIA	2	5	10985	3.4	368	1	6	8930	336			
	830714	NEW YORK	2	7	11537	3.9	442							
		NEW JERSEY	1	2	11425	3.4	388							
		PENNSYLVANIA	490	1343	11314	3.7	419	419	10	11027	411	2	11199	419
		MARYLAND	3	4	9762	4.0	376	2	17	8710	372	2	8660	366
		WEST VIRGINIA	1	4	14898	3.6	529							
	834119	NEW YORK	1	1	15550	3.5	552	1	33	10610	347			
		PENNSYLVANIA	519	1203	10821	3.6	387	430	10	11019	410	2	10945	410
		OHIO	1	3	11133	3.5	386	1	9	12467	429	2	12895	464
		WISCONSIN	1	1	14880	3.5	526	1	16	10480	376			
		MARYLAND	2	7	9868	3.7	362	2	5	9865	400	3	8249	342
	834729	PENNSYLVANIA	41	110	11164	3.5	388	24	11	10647	394	2	10364	382
	835584	PENNSYLVANIA	21	58	11099	3.5	386	7	8	12372	475	2	10494	409
		MICHIGAN	1	1	19460	3.6	696							
	837326	PENNSYLVANIA	67	171	11702	3.6	418	46	9	11027	410	2	11073	408
		WEST VIRGINIA	1	2	11125	3.6	399							
	842781	PENNSYLVANIA	119	331	10588	3.7	390	73	9	11129	410	2	10960	406
	857217	PENNSYLVANIA	79	187	10362	3.6	374	41	8	10942	403	2	10874	399
	864079	PENNSYLVANIA	97	232	10255	3.6	369	63	8	10565	394	2	10381	391
	870240	PENNSYLVANIA	291	765	10946	3.7	399	255	12	11128	412	2	11081	412
		OHIO	1	2	11215	3.3	369	1	4	12130	455	2	12388	457
		INDIANA	1	1	14170	4.0	566					1	13004	458
		MARYLAND	1	2	13880	3.8	524	1	1	6360	306	1	6976	308
		WEST VIRGINIA	4	11	11165	3.8	415	1	4	5440	248	2	9937	377
	872565	PENNSYLVANIA	16	54	10111	3.7	372	11	10	10680	401	2	10538	405
	897801	PENNSYLVANIA	75	159	10736	3.7	394	29	7	11001	397	2	10628	394
	898205	PENNSYLVANIA	163	366	11014	3.9	422	152	10	11108	416	2	11243	419
		MARYLAND	1	1	11380	4.0	455	1	4	12150	457	1	10420	435
		WEST VIRGINIA	1	1	14320	3.6	511	1	17	12360	451	1	11979	438
	900542	PENNSYLVANIA	307	559	11570	3.7	427	305	16	11309	421	2	11466	428
		OHIO	1	1	10020	3.2	321	1	21	10280	374	1	13505	487
		WEST VIRGINIA	1	1	13210	3.6	474	1	12	10760	377	1	11587	411
	904578	PENNSYLVANIA	55	142	11054	3.7	402	35	9	11443	422	2	11128	416
		MARYLAND	1	2	14205	4.1	581							
	904581	CONNECTICUT	1	1	11240	4.3	488	1	3	10820	416	1	11369	399
		NEW YORK	2	2	11365	3.9	440	1	79	8050	392			
		PENNSYLVANIA	1075	2072	10646	3.8	401	1041	12	11169	416	2	11124	417
		OHIO	1	1	12340	3.3	409	1	4	12760	422			
		MICHIGAN	1	1	11130	4.1	451	1	14	10730	398	1	12241	463
		MARYLAND	2	4	11035	3.8	416	2	13	10490	432	2	9925	424
		VIRGINIA	1	1	17860	3.7	659	1	37	14560	538	1	14486	548
		WEST VIRGINIA	8	13	11117	3.7	411	6	19	11958	434	1	12051	433
		NORTH CAROLINA	1	1	9860	4.0	394	1	19	11590	434	1	10791	404
		GEORGIA	1	3	12997	3.6	466	1	8	13965	487	2	11124	407
	925778	PENNSYLVANIA	81	227	10598	4.0	417	46	7	11445	421	2	11330	421
	929161	NEW YORK	2	3	12433	4.1	499							
		PENNSYLVANIA	665	1136	10951	3.8	413	657	14	11347	426	2	11733	441
		OHIO	1	1	13580	4.0	549	1	5	13070	475	1	14148	501
		MARYLAND	2	4	9465	3.5	339	2	24	10130	409	2	10642	429
		WEST VIRGINIA	3	5	10702	3.5	379	3	11	10523	384	2	9941	368
		GEORGIA	1	2	12010	3.6	428	1	9	12950	449	1	9941	392
	934851	PENNSYLVANIA	149	379	10985	3.8	416	101	9	11075	413	2	11270	425
		MARYLAND	1	4	7293	4.3	318	1	15	9190	352	2	7505	294
		WEST VIRGINIA	1	1	4520	4.1	184							
	938242	VERMONT	1	1	8740	3.8	332							
		PENNSYLVANIA	102	288	10395	3.8	396	49	9	11300	413	2	11136	413
	943788	PENNSYLVANIA	109	191	10316	3.8	394	106	15	11076	417	2	11517	435
		MARYLAND	1	1	7930	3.9	308	1	12	11240	467	1	10813	479
		VIRGINIA	1	1	10890	4.1	450	1	27	15830	580	1	13581	516
		ALABAMA	1	1	8450	3.6	303							
	946250	NEW YORK	2	2	12955	3.4	440	1	23	10180	393	1	9396	349
		PENNSYLVANIA	767	1311	11539	3.8	435	756	15	11287	425	2	11682	440

TABLE 16.—DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS—GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		OHIO	2	3	9768	4.0	387	2	7	11695	407	1	12110	428
		DELAWARE	1	2	13145	3.5	462	1	10	13050	475	1	10617	392
		MARYLAND	7	11	13244	4.1	526	7	17	11735	469	2	10599	451
		VIRGINIA	2	3	15920	3.7	583	2	12	13185	467	2	12546	543
		WEST VIRGINIA	1	1	8490	4.2	359	1	20	12160	450	1	11336	410
	957208	PENNSYLVANIA	228	533	11245	3.7	413	158	10	10926	410	2	10913	409
		VIRGINIA	1	1	8540	3.5	303							
	985722	PENNSYLVANIA	45	118	11239	3.7	410	30	8	10627	396	2	11123	414
		MARYLAND	1	5	12100	3.9	470	1	7	9182	378	5	8787	363
	1000392	PENNSYLVANIA	27	55	11647	3.6	417	27	13	11549	430	2	11729	441
		IOWA	5	6	12373	4.0	484							
	1008924	NEW YORK	1	1	9750	4.2	405							
		PENNSYLVANIA	256	483	10831	3.7	405	250	12	11299	422	2	11484	432
		OHIO	2	5	11994	4.2	503	2	11	11720	400	2	12424	445
		MINNESOTA	22	30	12174	3.5	420							
		MARYLAND	2	2	8345	4.1	340	2	18	9420	387	1	9652	413
		WEST VIRGINIA	1	1	9770	3.9	383					1	11042	441
	1012574	NEW YORK	2	3	13435	3.3	438	2	8	11685	439	2	13277	476
		PENNSYLVANIA	155	282	11935	3.7	433	152	14	11164	422	2	11573	437
		MARYLAND	2	2	10960	3.7	400	2	13	11785	498	1	10170	440
		WEST VIRGINIA	1	2	11270	3.3	369	1	19	10340	375	2	10873	407
	1015248	NEW YORK	1	1	11970	3.5	414	1	79	8080	394			
		PENNSYLVANIA	793	1277	11717	3.7	436	775	16	11254	425	2	11782	445
		OHIO	1	2	10000	3.8	375	1	4	10410	364	1	12110	428
		MARYLAND	4	7	12671	3.9	488	4	5	9289	365	2	11867	468
		VIRGINIA	1	1	14200	3.5	496	1	8	13660	534			
		WEST VIRGINIA	8	10	11152	3.7	411	7	11	11808	429	1	11690	428
	1016852	VERMONT	1	1	9410	3.8	355							
		NEW YORK	1	1	12150	3.6	439							
		PENNSYLVANIA	492	979	10688	3.6	388	454	11	11382	424	2	11421	426
		OHIO	1	2	12190	3.8	462	1	14	12055	403	2	12208	405
		MARYLAND	4	8	9510	3.7	354	4	12	9179	392	2	8882	364
		WEST VIRGINIA	2	3	9038	3.8	341							
		ALABAMA	1	1	9810	2.8	279							
	1016853	NEW YORK	1	2	12710	3.2	410							
		NEW JERSEY	1	1	10900	3.2	345							
		PENNSYLVANIA	335	661	10600	3.7	390	317	12	11032	413	2	11139	417
		MARYLAND	5	7	9029	3.8	338	3	12	9622	394	1	10777	448
		WEST VIRGINIA	1	2	13605	3.9	530	1	14	12755	466	2	12655	460
	1023967	NEW HAMPSHIRE	1	1	13320	4.2	554	1	9	9720	388	1	10726	436
		VERMONT	1	1	7560	3.9	298							
		PENNSYLVANIA	864	1873	11104	3.8	414	790	10	11111	414	2	11128	417
		OHIO	2	5	13537	3.5	474	1	9	11143	410	2	12039	432
		MICHIGAN	1	1	9990	3.6	360	1	6	12190	395			
		MARYLAND	4	11	9110	4.0	358	4	17	9915	411	2	9807	402
	1031803	PENNSYLVANIA	125	235	10372	3.7	379	123	14	11423	428	2	11444	431
		MARYLAND	1	4	12755	3.7	476	1	8	10593	427	4	9973	412
		WASHINGTON	1	1	12430	3.7	461	1	7	16640	629	1	15729	608
	1033033	PENNSYLVANIA	15	53	11988	3.8	457	13	9	11769	434	3	11764	436
	1033985	PENNSYLVANIA	259	477	10647	3.6	377	236	11	10941	415	2	10930	412
		WISCONSIN	1	1	7350	3.2	235					1	9538	327
		MARYLAND	2	5	9520	3.7	356	2	9	9215	391	2	8418	339
	1041165	PENNSYLVANIA	25	58	10788	3.6	389	22	9	10339	391	2	10545	399
		MARYLAND	1	1	5920	3.4	201							
	1041665	PENNSYLVANIA	38	113	11326	3.8	434	35	13	11319	422	2	11137	419
	1041842	PENNSYLVANIA	658	1119	11433	3.7	423	650	16	11284	423	2	11646	437
		OHIO	1	3	10263	3.7	377	1	11	10620	389	3	12528	450
		MARYLAND	3	4	10765	3.8	411	3	23	11665	464	1	10724	433
		VIRGINIA	1	1	9780	3.6	351							
		WEST VIRGINIA	3	4	10157	3.8	386	2	19	12110	448	1	12056	441
	1062747	NEW YORK	1	2	14885	4.0	584	1	14	12215	462	1	10192	383
		PENNSYLVANIA	299	565	10553	3.8	402	290	12	11070	416	2	11200	420
		MARYLAND	2	5	12879	3.9	501	2	9	10633	433	3	9821	404
	1066229	NEW YORK	2	2	11655	3.5	403	2	28	9305	390	1	11194	409
		PENNSYLVANIA	1070	1564	11162	3.7	407	1042	16	11260	425	1	11703	440
		MARYLAND	4	4	13126	4.0	530	4	11	11540	466	1	10764	445
		VIRGINIA	2	2	11720	3.9	453	2	18	11225	438	1	11178	445
		WEST VIRGINIA	7	10	10686	3.6	387	7	16	11284	407	2	11526	418

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD		
								NO. OAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		GEORGIA	1	1	10280	4.0	414	1	17	14900	547	1	12808	472
	1069852	PENNSYLVANIA	272	402	10652	3.9	413	264	16	11446	435	1	12008	456
		MARYLAND	1	2	10410	4.0	421	1	57	10270	383	1	9908	361
		WEST VIRGINIA	1	1	8780	3.7	328	1	23	9020	319	1	9200	324
	1076010	PENNSYLVANIA	29	74	11201	3.7	413	29	13	10827	404	2	11127	417
		WEST VIRGINIA	2	2	9475	3.5	327	2	17	10925	390	1	12884	473
	1082001	PENNSYLVANIA	1	1	6410	4.6	293	1	12	8900	444	1	7150	363
		MARYLAND	1	3	10603	3.9	406	1	5	10050	411	3	8771	359
	1083427	PENNSYLVANIA	19	46	10737	4.1	432	19	13	11323	441	3	11035	440
	1087980	PENNSYLVANIA	50	95	10965	3.8	413	48	13	11178	422	2	11108	417
		MARYLAND	1	2	8055	4.3	339	1	14	7895	321	2	9254	377
	1090000	PENNSYLVANIA	223	415	10805	3.8	411	217	14	11030	413	2	11333	425
		OHIO	2	2	11370	3.8	433	2	13	13460	525	1	13505	487
		MARYLAND	1	1	7030	3.7	257							
		WEST VIRGINIA	1	1	11680	3.5	410	1	12	10880	383	1	11194	397
	1102436	PENNSYLVANIA	931	1576	12123	3.8	461	917	15	11436	428	2	11997	451
		OHIO	1	1	13580	3.9	526	1	9	12430	455	1	13505	487
		MARYLAND	2	3	15048	3.7	539	2	5	8340	350			
		VIRGINIA	2	2	13045	3.7	470							
		WEST VIRGINIA	2	6	11910	4.0	478	1	5	12610	442			
	1104658	PENNSYLVANIA	86	89	11469	3.9	448	83	16	11461	434	1	11963	453
		WEST VIRGINIA	1	1	10050	4.2	425	1	7	10370	337	1	11183	415
	1108504	PENNSYLVANIA	633	1041	11977	3.7	448	623	13	11194	423	2	11648	440
		OHIO	1	3	12933	3.0	394	1	11	12203	441	2	12737	461
		MARYLAND	11	19	13060	3.8	502	11	12	10929	426	1	10409	427
		WEST VIRGINIA	1	2	12085	3.5	422							
	1118709	PENNSYLVANIA	16	31	10345	3.8	392	16	14	11597	438	2	11447	425
		MINNESOTA	1	3	11740	3.3	394	1	11	11600	398	3	11809	412
	1119685	PENNSYLVANIA	12	27	11556	3.6	416	12	15	11003	407	2	11182	414
	1119686	PENNSYLVANIA	447	616	11911	3.9	459	443	16	11409	428	1	11811	444
		MARYLAND	1	1	14820	3.3	491	1	2	16820	582	1	14737	533
		ALABAMA	1	2	12295	3.8	462							
	1122271	PENNSYLVANIA	42	69	10468	3.8	397	41	12	10953	413	2	11373	436
		MARYLAND	1	3	10807	3.6	390	1	12	10463	409	3	9138	355
		ALABAMA	1	1	8050	3.6	294	1	8	8900	317			
	1123039	PENNSYLVANIA	86	151	10638	3.8	408	85	15	11157	421	2	11553	436
		OHIO	1	1	9240	3.3	305					1	13571	451
	1123770	PENNSYLVANIA	2	2	4205	3.8	164					1	11445	405
	1125026	PENNSYLVANIA	58	114	12132	3.7	448	57	18	11065	413	2	11678	437
		MARYLAND	1	1	8250	3.7	303	1	12	7520	308	1	9145	374
	1128308	PENNSYLVANIA	534	934	11475	3.7	424	528	14	11257	423	2	11642	437
		OHIO	1	1	6270	4.1	257	1	25	10580	390	1	13505	487
		MARYLAND	5	5	12964	3.8	488	5	9	12210	484	1	11718	474
		VIRGINIA	1	1	12770	4.0	515	1	31	8360	331	1	9396	384
		WEST VIRGINIA	5	8	12747	3.7	466	4	10	12069	439	1	12274	448
	1138797	PENNSYLVANIA	210	277	11369	3.6	413	206	19	11478	430	1	12116	454
		WEST VIRGINIA	2	2	11265	3.4	382	2	7	9480	331	1	12219	435
	1152232	PENNSYLVANIA	52	53	11356	3.9	448	51	17	11578	442	1	12057	457
	1204515	PENNSYLVANIA	210	261	11640	3.8	440	208	17	11635	441	1	12241	464
	1232220	PENNSYLVANIA	164	172	11382	4.0	455	164	15	11642	439	1	12219	464
		MARYLAND	1	1	10170	3.6	369	1	3	10050	356			
		WEST VIRGINIA	2	2	8655	3.6	313	1	5	11530	402	1	11772	418
	1237074	PENNSYLVANIA	287	396	10929	3.8	415	280	17	11455	432	1	11868	447
		OHIO	4	4	10475	3.8	397	2	19	10900	403	1	13505	487
		MARYLAND	1	1	10040	3.9	387	1	4	12480	474	1	10420	435
		WEST VIRGINIA	1	1	9170	3.7	342	1	18	12300	452	1	13080	483
	1266978	PENNSYLVANIA	51	51	10210	3.6	370	48	15	11242	426	1	12256	467
	1290293	PENNSYLVANIA	7	7	8907	3.7	330	7	14	12066	457	1	12107	457
JER.	362559	PENNSYLVANIA	21	59	7901	5.2	409	5	13	8186	427	2	8329	435

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY NO.	MILK LB.	FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
	393739	PENNSYLVANIA	59	158	7641	5.3	403	7	6	7425	382	2	7397	381
	395189	PENNSYLVANIA	144	394	7461	5.0	373	43	9	7503	381	2	7614	394
		GEORGIA	1	1	8310	5.5	457							
		TEXAS	1	1	9260	4.5	420							
	398870	PENNSYLVANIA	245	658	7194	5.2	373	66	8	7879	409	2	7855	408
		OHIO	2	2	7435	5.9	436	1	3	7980	376			
		GEORGIA	1	1	9420	5.0	468							
	409100	PENNSYLVANIA	6	9	6084	5.0	301							
	410088	PENNSYLVANIA	53	151	7081	5.1	357	15	12	7604	386	2	7482	393
	415055	PENNSYLVANIA	46	130	7273	5.2	376	8	8	7412	392	2	8376	421
	416196	PENNSYLVANIA	91	247	7169	5.3	380	18	7	7771	405	2	8360	429
		MARYLAND	1	2	8205	5.4	436							
		GEORGIA	2	3	8638	5.5	476	1	3	9700	448			
	423510	PENNSYLVANIA	14	37	5633	5.4	303	7	5	7040	389	2	6429	351
	434773	PENNSYLVANIA	60	155	6667	5.1	339	10	8	7352	383	2	7678	375
		GEORGIA	2	3	8888	5.0	436	1	3	8155	393	1	7924	400
	434778	PENNSYLVANIA	189	462	6869	5.3	361	73	10	7792	414	2	7879	416
		MARYLAND	2	4	7378	5.0	362							
	434951	PENNSYLVANIA	16	28	6721	5.6	376	9	12	7829	398	2	8129	420
	438225	PENNSYLVANIA	10	32	6408	5.1	326	2	8	7306	382	2	6380	327
	443103	PENNSYLVANIA	33	81	7738	5.6	429	15	11	7822	415	2	7951	421
	445183	PENNSYLVANIA	40	74	6991	5.3	368	5	11	7231	382	1	7356	384
		MARYLAND	1	1	9190	4.8	445							
	459876	PENNSYLVANIA	50	108	6400	5.6	358	21	9	7557	389	2	8142	401
		MARYLAND	1	2	7075	5.9	418							
	472366	PENNSYLVANIA	58	99	6190	5.5	341	26	11	8064	418	1	7340	378
	474007	PENNSYLVANIA	280	582	7846	5.2	407	140	14	7779	405	2	8173	428
		OHIO	2	3	10968	5.1	554	2	10	9673	505	1	9701	509
		MARYLAND	1	2	8515	5.4	460							
		WEST VIRGINIA	1	1	2330	4.7	110	1	17	6510	300	1	6453	303
	476086	PENNSYLVANIA	50	84	6737	5.3	351	27	15	7634	397	2	7496	406
	482707	PENNSYLVANIA	3	11	7671	5.3	413							
	482861	PENNSYLVANIA	147	232	7341	5.5	401	73	14	7427	381	1	7769	408
		OHIO	1	2	9590	5.4	520	1	19	11030	565			
		MARYLAND	1	1	6110	5.6	340							
	500929	PENNSYLVANIA	34	58	7304	5.5	405	16	18	8663	454	2	8365	449
		OHIO	1	1	8790	6.5	571	1	11	10300	549	1	9701	509
	501764	PENNSYLVANIA	4	7	8443	5.4	450	2	5	7143	399	2	7742	416
	506894	PENNSYLVANIA	27	39	7113	5.3	372	11	11	7365	381	1	7328	383
	514884	PENNSYLVANIA	104	146	7587	5.3	402	65	14	7868	409	1	8562	453
		OHIO	3	8	7325	5.5	401	3	9	9195	458	1	8720	431
	514981	PENNSYLVANIA	95	151	8179	5.1	416	49	16	8266	427	1	8517	440
		OHIO	1	3	12970	4.9	634	1	15	10265	538	1	9701	509
	515866	PENNSYLVANIA	56	106	7493	5.1	382	21	9	7196	364	1	7668	391
		MARYLAND	2	6	7730	5.7	432							
	516140	PENNSYLVANIA	25	49	7039	5.3	372	13	11	7953	421	2	7466	396
	524199	PENNSYLVANIA	22	22	7898	4.6	367	13	11	8302	424	1	8628	448
		TENNESSEE	1	1	10110	4.0	404	1	39	10600	505	1	10584	519
	525996	PENNSYLVANIA	50	86	7016	5.1	360	22	10	7430	389	2	7962	424
		OHIO	1	3	9980	5.2	524	1	15	10585	558	2	9701	509
	528829	PENNSYLVANIA	14	26	6415	5.3	336	7	11	7533	386	1	6937	361
	534758	PENNSYLVANIA	67	111	7903	5.2	407	41	16	8294	426	2	8817	454
		OHIO	1	1	8770	5.3	465	1	11	10300	559	1	9701	509

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREEO	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
								NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
8.S.	544042	PENNSYLVANIA	73	121	7047	5.2	365	37	14	7411	384	1	7981	418
	560806	PENNSYLVANIA	2	2	2345	4.6	109	1	1	4070	161	1	8437	449
	567064	PENNSYLVANIA	19	20	6337	5.4	348	14	13	6706	362	1	8427	457
	571911	MAINE	2	3	6815	4.8	330	1	2	9490	453	1	8960	464
		NEW JERSEY	1	1	2090	5.9	123	1	2	5100	332			
		PENNSYLVANIA	11	11	7835	5.0	394	6	10	7897	419	1	8884	477
		SOUTH DAKOTA	1	1	10520	4.7	495	1	5	8120	464	1	8655	456
		WEST VIRGINIA	1	2	5345	5.2	278	1	38	7270	367	1	7456	380
	68913	PENNSYLVANIA	28	47	10723	4.1	436	11	9	11059	464	1	10428	453
		MARYLAND	2	3	9770	4.4	423							
	70410	CONNECTICUT	2	2	12465	4.2	526	2	23	13045	589	1	13058	611
		NEW YORK	2	2	8800	3.8	332	2	12	8905	351	1	8480	348
		PENNSYLVANIA	70	132	10841	4.3	465	37	9	10720	449	2	10012	427
		INDIANA	1	1	13560	4.7	637							
		MARYLAND	1	3	12077	4.6	557					1	9450	344
	71009	PENNSYLVANIA	34	58	9437	4.4	410	14	11	10201	422	1	10793	458
		ILLINOIS	1	1	9420	4.6	431	1	12	8760	362	1	8513	354
		MARYLAND	1	2	5755	4.6	265							
	86259	NEW JERSEY	1	1	8280	4.4	365							
		PENNSYLVANIA	48	78	9581	4.2	405	17	6	10264	412	2	10259	423
		DELAWARE	1	1	11780	4.6	548					1	15347	566
		MARYLAND	2	4	11214	4.2	467							
006 HOL.	96800	PENNSYLVANIA	42	71	9276	4.2	388	19	8	10993	456	1	9710	422
		DELAWARE	2	3	7330	4.3	311	2	15	10645	470	1	11620	501
		MARYLAND	2	5	9445	4.3	395					1	11053	450
	98600	PENNSYLVANIA	5	9	6537	4.1	270	3	9	8757	369	1	6126	249
	114212	PENNSYLVANIA	8	8	11496	4.3	497	5	6	13220	543	1	12590	545
	115881	NEW JERSEY	1	1	14790	4.4	649							
		PENNSYLVANIA	61	90	9753	4.1	404	30	10	10643	444	1	10499	443
		INDIANA	1	1	9530	4.4	419							
		MARYLAND	1	2	14530	4.1	589							
	1007680	NEW HAMPSHIRE	1	1	10940	3.8	417	1	19	11050	438	1	11936	470
		VERMONT	8	8	11819	3.8	454	7	30	13860	512	1	14443	530
		MASSACHUSETTS	3	4	13303	3.9	517	3	14	13233	500	1	13658	524
		RHODE ISLAND	10	16	14435	3.8	548	10	13	15922	606	1	14040	532
		CONNECTICUT	3	5	13670	3.6	494	2	23	16180	625	2	15909	605
		NEW YORK	139	190	12868	3.7	479	122	24	13410	491	1	13559	502
		NEW JERSEY	46	56	12528	3.8	475	25	25	12359	468	1	12497	464
		PENNSYLVANIA	276	358	11750	3.7	439	260	24	12311	453	1	12920	479
		OHIO	2	2	12870	3.5	444	2	12	12935	448	1	12110	419
		INDIANA	2	2	10330	3.9	405	2	9	11060	425	1	10955	425
		ILLINOIS	1	1	12660	3.6	462	1	1	13060	444	1	16350	588
		MICHIGAN	2	2	11100	3.5	384	2	21	13120	488	1	15964	558
		MISSOURI	5	6	13075	3.7	493	5	10	13352	494	1	13273	489
		KANSAS	3	3	12063	3.8	461	2	19	11140	415	1	11805	450
		DELAWARE	1	1	16010	3.6	584	1	22	14490	531	1	14813	534
		MARYLAND	36	45	12364	3.9	475	34	20	12941	495	1	12481	481
		VIRGINIA	13	15	14600	3.8	562	12	28	14174	536	1	14503	542
		WEST VIRGINIA	11	13	13280	3.5	467	10	25	13661	468	1	13276	465
		NORTH CAROLINA	2	4	12577	3.8	468	1	21	11040	436	2	13724	494
		SOUTH CAROLINA	10	10	13230	3.6	468	10	25	12909	456	1	12677	455
		GEORGIA	30	30	13986	3.7	519	30	41	13405	493	1	13155	483
		TEXAS	1	1	15650	3.7	575	1	8	15810	548	1	12927	449
		COLORADO	3	4	12203	3.7	449	2	10	14253	536	1	14530	550
		UTAH	1	1	13390	3.8	508	1	14	14990	540			
007 AYR.	1124915	RHODE ISLAND	3	3	13570	3.7	499	3	20	15760	605	1	15042	572
		NEW YORK	3	4	12220	3.6	437	3	8	13612	493	2	13304	480
		PENNSYLVANIA	36	42	9807	3.8	370	34	27	11646	435	1	13037	482
		MARYLAND	1	1	4020	3.0	120	1	10	12500	444	1	12829	463
	1195586	PENNSYLVANIA	14	22	10636	3.7	398	13	24	12329	460	2	12978	480
	1212102	NEW YORK	2	2	13150	3.7	478	2	23	12795	468	1	11838	446
		PENNSYLVANIA	15	28	11915	3.8	455	15	15	12371	468	2	13407	508
		MARYLAND	1	2	14180	4.0	556	1	5	13420	521			
	51943	RHODE ISLAND	1	1	8110	4.1	332							
		NEW YORK	1	1	11000	3.2	357							
		PENNSYLVANIA	164	387	8966	4.1	365	103	8	9265	373	2	9178	369
		IOWA	4	6	9948	4.2	408	1	8	8535	352	2	9162	377
		MISSOURI	1	1	9730	4.6	450							
		MARYLAND	4	12	8591	4.2	360	3	16	8973	366	3	9257	379

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY NO.	AV. MILK LB.	AV. FAT LB.	YEARLY HERD NO.	AV. MILK LB.	AV. FAT LB.
		NORTH CAROLINA	5	7	7234	4.3	308							
	60747	PENNSYLVANIA	13	34	8490	4.0	336	3	10	9269	375	3	8903	356
	62560	PENNSYLVANIA	6	24	8586	3.9	330							
	72686	VERMONT	2	4	9149	4.6	417	1	1	1870	58			
		MASSACHUSETTS	3	10	10055	4.4	433	3	17	10313	440	3	10389	450
		NEW YORK	22	43	9485	4.1	391	5	22	11419	448	2	11120	447
		NEW JERSEY	7	12	8555	4.3	369							
		PENNSYLVANIA	334	744	8443	4.2	358	254	10	9575	387	2	9591	389
		IOWA	2	3	7413	4.4	326	1	7	9010	393			
		NEBRASKA	4	9	10246	4.3	437							
		KANSAS	3	8	9676	4.4	421							
		DELAWARE	3	7	9253	4.1	382	3	15	10421	422	2	9414	376
		MARYLAND	22	62	9134	4.3	389	19	19	8467	349	3	8817	360
		VIRGINIA	1	1	7710	4.3	335	1	11	8710	354	1	8099	341
		WEST VIRGINIA	13	20	9110	4.4	399	1	7	11803	501	3	10857	450
		NORTH CAROLINA	12	23	9201	4.2	383	9	13	9788	365	1	8502	330
		GEORGIA	2	4	7474	3.7	281	2	6	9452	380			
		MISSISSIPPI	1	1	6640	4.4	289							
	75377	PENNSYLVANIA	28	80	8715	3.9	337	16	7	9080	352	2	8807	354
		NORTH CAROLINA	5	10	6574	4.0	262							
	80279	PENNSYLVANIA	48	95	8280	4.2	349	18	9	9552	380	2	9391	369
		MARYLAND	1	1	4350	4.0	173							
		NORTH CAROLINA	2	3	8280	4.4	366							
	91668	NEW YORK	1	1	11400	4.1	471							
		PENNSYLVANIA	50	87	9283	4.2	392	50	12	10059	413	2	10135	415
		OHIO	1	1	11230	4.5	501	1	3	9880	412			
		INDIANA	1	1	6810	4.7	318							
		DELAWARE	1	1	11800	3.9	464	1	8	11460	472			
		MARYLAND	2	3	8568	4.1	342	2	21	9213	377	2	9470	390
		MISSISSIPPI	1	2	9785	4.4	426							
	92543	NEW YORK	1	1	8450	3.6	308	1	4	7350	293			
		PENNSYLVANIA	67	154	8477	4.1	348	57	12	9479	381	2	9476	381
		DELAWARE	1	2	11510	4.1	466	1	11	10975	443	2	11309	441
		MARYLAND	1	3	8300	4.4	369	1	6	8800	375	3	9221	400
		GEORGIA	1	3	7617	4.0	305	1	2	9680	382			
	95443	NEW YORK	15	27	11334	4.1	467	12	19	11300	472	2	11274	475
		PENNSYLVANIA	83	145	8972	4.2	380	83	13	9983	406	2	10079	416
		ILLINOIS	1	3	9030	4.2	377	1	23	10557	434	2	9483	403
		WISCONSIN	1	1	10250	4.2	429	1	7	9260	375			
	105105	VERMONT	2	2	8305	4.4	357	2	13	9275	382	1	8578	357
		NEW YORK	4	6	8792	4.2	380	3	14	11960	486	2	11127	449
		PENNSYLVANIA	148	259	9152	4.1	379	135	11	9750	398	2	9862	400
		INDIANA	1	1	6980	3.7	257	1	7	6000	258	1	7652	306
		DELAWARE	1	2	8825	3.9	339	1	11	9135	363	2	9718	388
		MARYLAND	3	4	9188	4.2	388	3	20	10253	426	1	9814	412
		NORTH CAROLINA	3	3	7197	3.9	279	3	41	8140	299	1	8651	322
		MISSISSIPPI	3	4	9552	4.0	380							
	112025	NEW YORK	1	1	11510	4.1	471	1	1	11700	525	1	8360	358
		PENNSYLVANIA	29	37	9256	4.1	382	28	12	10014	409	1	10118	417
		MARYLAND	2	2	8750	4.1	355	2	34	8585	364	1	9064	379
GUER	249227	RHODE ISLAND	1	7	8143	4.9	397	1	23	7589	355	6	7449	348
		CONNECTICUT	1	3	14577	4.3	629	1	29	11380	553	3	10940	544
		NEW YORK	2	2	9180	3.7	334							
		PENNSYLVANIA	231	682	7708	4.9	373	67	8	8846	404	2	8440	397
		DELAWARE	1	6	7677	5.0	387	1	6	9075	427	4	9426	438
		MARYLAND	1	5	8726	5.5	475							
	254243	PENNSYLVANIA	22	82	7191	5.0	356	12	14	7696	343	2	7858	365
	278150	PENNSYLVANIA	37	112	7635	5.0	378	8	9	8473	391	2	8609	397
		MARYLAND	1	2	7615	5.2	390							
	287311	RHODE ISLAND	2	11	9758	4.6	443	2	18	7423	345	5	7410	348
		NEW JERSEY	3	6	7748	4.8	374							
		PENNSYLVANIA	86	262	7501	4.8	360	46	9	8546	396	2	8610	403
	288290	PENNSYLVANIA	14	54	6866	5.2	359	5	8	7626	367	3	8174	405
	359623	PENNSYLVANIA	10	16	6883	4.9	336	10	22	10017	408	2	10353	417
	390507	NEW JERSEY	1	1	8650	5.5	478							
		PENNSYLVANIA	283	684	7581	5.0	380	222	13	8573	397	2	8603	403
		MARYLAND	2	5	7494	5.2	387							
		VIRGINIA	1	1	10050	4.7	473	1	1	6340	308			

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE KENTUCKY	DAUGHTERS NO.	RECORDS NO.	MILK LBS.	TEST PCT.	FAT LBS.	3DS-DAY CONTEMPORARY AV.				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LBS.	FAT LBS.	NO.	MILK LBS.	FAT LBS.
			1	3	10547	4.5	473	1	16	11057	460	2	11576	478
	396152	NEW JERSEY	1	2	8080	4.3	345	1	45	8755	422	2	8688	398
		PENNSYLVANIA	90	230	7471	5.0	369	77	12	8965	407	2	8656	402
	399670	NEW JERSEY	2	4	6373	4.5	285	1	45	8830	424	2	7993	362
		PENNSYLVANIA	182	447	7363	5.0	365	132	12	8447	390	2	8460	394
		MARYLAND	2	2	7325	5.4	397							
	443312	NEW JERSEY	1	1	7420	3.9	286							
		PENNSYLVANIA	81	169	7525	4.8	359	77	13	8458	409	2	8442	409
	465469	NEW JERSEY	2	3	7715	4.7	363	1	49	10970	562	1	9625	436
		PENNSYLVANIA	59	120	7605	4.8	361	58	12	9111	412	2	9100	412
	470890	PENNSYLVANIA	39	82	7921	4.8	376	37	14	8475	391	2	8545	397
	472450	NEW YORK	1	1	7610	5.5	419	1	12	10900	415	1	8055	389
		PENNSYLVANIA	81	150	7121	4.6	329	80	14	8853	402	2	8867	407
		MARYLAND	1	2	8855	5.0	438							
		NORTH CAROLINA	1	5	8564	4.7	405	1	10	9304	405	3	9381	414
	483668	PENNSYLVANIA	46	88	6866	4.8	331	46	15	8530	385	2	8655	395
	502634	PENNSYLVANIA	8	9	7185	4.6	330	8	16	7225	311	1	9281	413
	509305	PENNSYLVANIA	15	20	7133	4.8	344	15	12	8824	392	1	9220	423
	509775	PENNSYLVANIA	1	2	5185	5.1	261	1	24	7100	337	2	7303	353
	521152	PENNSYLVANIA	1	1	7520	5.0	372	1	10	9480	455	1	8731	416
HOL.	561789	NEW JERSEY	1	4	13228	3.6	475							
		PENNSYLVANIA	8	32	11544	3.8	423	2	19	13000	467	3	12633	448
	704747	NEW JERSEY	3	8	13444	3.3	440							
		PENNSYLVANIA	190	613	11529	3.5	406	78	9	12040	438	2	11937	435
		NORTH CAROLINA	1	3	12983	3.7	469	1	6	10220	425	2	8928	385
	724930	PENNSYLVANIA	19	90	11338	3.8	426	9	10	12197	430	3	11572	419
	771427	NEW YORK	1	3	9107	3.8	346							
		PENNSYLVANIA	64	233	12252	3.5	423	19	9	12345	452	2	12227	443
	776883	VERMONT	1	1	9820	3.9	386							
		PENNSYLVANIA	53	200	11727	3.5	404	19	9	11986	437	2	11570	419
	781005	PENNSYLVANIA	11	45	13178	3.4	443	5	25	13373	467	1	13355	473
	794214	PENNSYLVANIA	21	78	10774	3.3	360	11	20	11563	402	2	11459	394
	799361	NEW JERSEY	3	13	12597	3.5	441	1	4	12840	426			
		PENNSYLVANIA	736	2132	12049	3.5	418	547	15	11958	437	2	12354	451
		DELAWARE	2	5	11949	3.5	412	1	13	10403	385	3	10409	375
		MARYLAND	3	3	13010	3.4	452	2	5	11375	469			
	831724	PENNSYLVANIA	13	72	12705	3.7	469	5	6	11567	427	3	12020	450
	834607	PENNSYLVANIA	12	50	11083	3.8	414	7	8	11855	437	2	11436	436
	835579	NEW JERSEY	1	4	12323	3.9	478							
		PENNSYLVANIA	15	54	10228	3.6	366	3	16	11610	398	1	11672	401
	848063	PENNSYLVANIA	206	476	12223	3.5	429	193	18	12189	441	2	12322	447
		DELAWARE	1	3	13753	3.2	434	1	12	12123	446	2	12525	452
	866146	NEW JERSEY	1	5	12470	3.1	381							
		PENNSYLVANIA	473	1098	11755	3.7	428	413	15	12016	439	2	12150	446
		DELAWARE	1	1	11720	3.6	416	1	4	10110	392			
		MARYLAND	1	2	12020	3.6	432	1	7	8935	330	2	9151	332
		VIRGINIA	1	1	8790	3.8	337	1	72	11640	438			
		NORTH CAROLINA	1	4	9478	3.5	325	1	6	10383	362	3	10330	360
	875699	PENNSYLVANIA	134	399	11045	3.5	387	49	12	12435	449	2	12386	446
	894500	PENNSYLVANIA	13	51	11621	3.7	425	6	15	12440	455	4	12783	459
	909229	VERMONT	2	2	15225	3.7	558	2	23	14040	526	1	13549	504
		MASSACHUSETTS	1	1	10360	4.4	452	1	8	12740	455	1	15238	502
		CONNECTICUT	1	1	10810	3.6	389	1	7	15010	552			
		NEW YORK	42	61	12893	3.9	499	34	29	14185	542	1	14048	539
		NEW JERSEY	2	2	15615	3.7	566	2	13	14385	528	1	13424	503
		PENNSYLVANIA	1432	2563	11394	3.7	420	1415	16	12039	447	2	12460	462
		DELAWARE	1	5	10360	4.0	413	1	14	11932	420	5	11155	394
		MARYLAND	1	1	12960	3.9	501	1	32	12110	479	1	13167	509

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		VIRGINIA	3	4	10490	3.6	375	2	19	14490	547	2	13192	486
		NORTH CAROLINA	10	14	11920	4.0	465	8	8	11031	433	1	9506	346
	927829	PENNSYLVANIA	45	153	11645	3.7	431	28	13	11697	429	3	11906	441
		GEORGIA	1	2	8510	3.5	297							
	937720	NEW YORK	1	1	10000	3.8	379							
		PENNSYLVANIA	244	653	11767	3.5	410	205	13	12176	443	2	12213	443
		MARYLAND	1	4	9775	3.3	317	1	13	7903	295	4	8303	306
	951928	NEW YORK	1	2	15345	3.8	589							
		PENNSYLVANIA	303	853	11380	3.8	429	198	14	12219	444	2	12268	450
		DELAWARE	1	1	8230	3.8	316							
		MARYLAND	1	4	11813	3.8	451							
	1015792	CONNECTICUT	1	1	12640	4.0	511	1	2	7960	300			
		PENNSYLVANIA	244	473	12124	3.8	464	241	19	11984	441	2	12649	471
		MICHIGAN	1	2	11625	3.6	407	1	26	15055	525	2	14121	490
		MARYLAND	1	1	12610	3.4	429	1	8	10490	388			
		VIRGINIA	1	3	11427	3.8	438							
	1020473	NEW YORK	10	14	11981	3.9	475	10	22	13073	481	1	13560	487
		NEW JERSEY	1	1	16960	4.0	675	1	39	16150	654	1	16786	671
		PENNSYLVANIA	449	779	11981	3.8	457	447	19	12108	451	2	12734	477
		MARYLAND	2	4	12780	4.0	498	1	17	13525	513	2	13146	499
		VIRGINIA	1	1	15490	3.6	565	1	34	16520	583	1	14606	544
		WEST VIRGINIA	1	1	7870	3.4	266							
		NORTH CAROLINA	2	3	11805	3.5	410	2	53	9985	377	1	9995	378
		FLORIDA	1	1	10850	3.9	425	1	74	8620	373	1	8655	355
	1069952	PENNSYLVANIA	69	171	11489	3.8	430	69	15	11923	433	2	12160	444
	1074888	PENNSYLVANIA	390	695	11792	3.8	451	385	18	11679	438	2	12439	461
		MARYLAND	2	4	11590	4.0	453	2	12	13403	527	1	13238	523
		VIRGINIA	1	1	10560	3.7	394	1	12	9670	362	1	8938	330
	1076009	PENNSYLVANIA	24	77	11602	3.6	419	24	15	12070	444	3	11899	436
		NORTH CAROLINA	1	2	10465	3.5	366	1	11	10195	349	1	10192	343
	1101565	NEW JERSEY	1	1	12100	3.4	413	1	7	12110	439			
		PENNSYLVANIA	403	769	12031	3.7	439	400	19	11802	435	2	12318	454
		MARYLAND	1	2	12760	3.6	452	1	6	11465	445	2	11653	431
	1104797	NEW JERSEY	1	1	9090	3.4	308					1	8785	306
		PENNSYLVANIA	481	848	11664	3.8	447	478	18	11858	440	2	12396	461
		MARYLAND	1	2	13700	4.0	545	1	14	11630	465	1	12154	483
	1168575	RHODE ISLAND	1	2	12200	3.7	451	1	4	13070	479	2	12023	440
		CONNECTICUT	2	2	13600	3.6	478	2	16	10475	381	1	12922	468
		NEW YORK	9	11	11121	3.4	383	8	23	10341	376	1	12087	432
		NEW JERSEY	14	15	14717	3.9	573	13	24	14471	567	1	14966	585
		PENNSYLVANIA	573	871	12262	3.7	453	569	19	12166	453	1	12781	476
		MARYLAND	2	3	14430	3.6	520	2	11	13675	533	2	11429	449
		VIRGINIA	2	3	8655	3.7	321	2	23	10953	413	1	13538	523
	1182629	PENNSYLVANIA	270	345	11693	3.7	430	265	19	12004	444	1	12675	469
		OHIO	1	1	15920	3.0	474	1	2	14120	483	1	13647	477
		ILLINOIS	1	1	13590	3.6	492	1	9	11970	448	1	10301	398
		VIRGINIA	1	1	10680	3.6	386	1	12	9660	362	1	8933	330
	1187680	CONNECTICUT	1	1	13940	3.6	508	1	24	10520	395	1	10922	402
		PENNSYLVANIA	128	139	12930	3.9	503	127	18	12196	452	1	12746	474
	1210471	PENNSYLVANIA	39	54	10070	3.9	388	38	27	11502	427	1	12665	471
	1213135	PENNSYLVANIA	116	154	12495	3.7	463	114	22	11991	441	1	12651	466
		MARYLAND	1	1	14640	4.0	581	1	22	12280	490	1	12154	483
	1213136	PENNSYLVANIA	71	94	13762	3.6	493	71	19	12002	447	1	12563	465
	1260630	NEW JERSEY	2	2	14310	4.0	560	2	27	14040	537	1	14039	531
		PENNSYLVANIA	24	27	10411	4.1	432	24	14	11777	436	1	12965	484
JER.	447152	PENNSYLVANIA	29	74	7222	5.0	362	5	11	7952	396	3	8084	405
	452341	PENNSYLVANIA	46	133	7714	4.9	374	14	10	6383	421	2	8247	409
	496827	PENNSYLVANIA	40	114	7945	5.1	404	21	11	8448	429	3	8409	425
	508067	PENNSYLVANIA	35	92	8450	5.2	439	19	10	8303	424	2	8578	435
	514432	PENNSYLVANIA	22	35	7474	5.4	403	11	10	7518	393	2	7816	407
	524315	PENNSYLVANIA	8	16	6165	5.5	342	4	14	7320	369	2	8760	445
		CALIFORNIA	3	3	7265	5.3	390	3	12	9033	474			

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.			
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	
8. S.	525043	PENNSYLVANIA	44	63	7078	5.1	363	29	14	7826	402	1	8759	443	
	538279	PENNSYLVANIA	48	80	6738	5.3	356	27	21	7129	375	1	7594	407	
	538337	WISCONSIN	16	30	8328	5.5	459	16	8	8451	470	2	8035	440	
	541618	PENNSYLVANIA	40	59	6179	5.5	343	23	14	7262	370	1	8666	435	
	556311	VERMONT	1	2	9450	6.6	627								
		NEW YRK	1	2	7640	5.5	421	1	37	7100	377	1	6453	320	
		PENNSYLVANIA	34	56	7796	5.6	438	28	13	7739	401	1	9237	483	
	59585	RHODE ISLAND	1	2	12180	3.9	480								
		NEW JERSEY	1	2	10330	4.5	469	1	26	11550	486	1	9756	427	
		PENNSYLVANIA	39	73	11379	4.2	473	23	9	10602	441	2	10198	431	
		MARYLAND	5	6	10307	4.1	428					1	9556	380	
		MISSISSIPPI	1	3	11850	4.1	490								
	64505	NEW HAMPSHIRE	2	6	9798	4.3	422								
		CONNECTICUT	1	3	10650	4.0	432								
		NEW JERSEY	1	5	10910	4.3	472								
		PENNSYLVANIA	46	99	11099	4.2	465	24	9	10237	430	2	10132	424	
		MARYLAND	9	10	10703	4.2	452					1	9691	380	
	82517	NEW JERSEY	1	2	8855	4.3	379								
		PENNSYLVANIA	30	56	9584	4.4	421	13	10	9932	409	2	9914	408	
		MARYLAND	4	7	9035	4.6	410	1	12	7480	290	1	8944	358	
		VIRGINIA	1	1	10330	4.4	459								
		FLORIDA	1	1	13120	4.3	570								
	86137	MASSACHUSETTS	1	3	13260	4.7	621	1	7	12837	529	3	11158	483	
		NEW YORK	1	1	16390	4.3	711	1	30	12320	522	1	11707	500	
		NEW JERSEY	1	2	12070	4.2	501	1	21	10645	447	2	10306	445	
		PENNSYLVANIA	58	122	9542	4.3	413	31	9	10415	438	2	10160	431	
		MARYLAND	4	5	9278	4.0	371					2	9696	386	
		VIRGINIA	2	4	11695	4.3	496								
		MISSISSIPPI	1	1	6110	4.5	278								
008 AYR.	60744	CONNECTICUT	1	2	10840	4.5	491								
		NEW JERSEY	2	4	9212	4.0	367	1	1	9690	400	3	9476	370	
		PENNSYLVANIA	95	187	8783	4.2	368	79	11	9211	380	2	9498	391	
		DELAWARE	2	4	10380	4.3	441	2	12	9437	398	2	10384	438	
		MARYLAND	6	10	7499	4.5	331	6	6	8446	345	2	9096	372	
		FLORIDA	1	1	7500	4.2	315								
	63395	PENNSYLVANIA	3	12	9429	4.1	378								
	67314	NEW JERSEY	2	4	7913	4.1	327								
		PENNSYLVANIA	118	239	8292	4.4	362	98	11	9225	377	2	9258	379	
		IDWA	7	17	8164	4.4	359	6	5	9043	372	3	9280	365	
		DELAWARE	2	2	7120	4.6	324	1	23	7480	281	1	7238	290	
		MARYLAND	3	3	6403	4.3	274	3	10	8153	334	1	7461	309	
		VIRGINIA	2	2	7910	4.0	311	1	42	9060	370				
	75235	NEW JERSEY	1	3	11013	4.4	479								
		PENNSYLVANIA	25	43	8879	4.0	356	19	12	8429	345	2	9129	372	
		DELAWARE	1	3	10810	3.7	404	1	18	9097	352	3	8571	334	
		MARYLAND	1	1	10890	4.6	496	1	3	9990	450	1	9221	371	
	75321	NEW JERSEY	2	6	7663	4.0	304								
		PENNSYLVANIA	10	17	7802	4.1	321	2	6	9864	405	1	9450	424	
		KANSAS	2	2	7690	4.3	323	1	6	10160	392	1	7913	320	
		MARYLAND	1	2	7735	4.0	307	1	17	9660	382	2	9887	393	
		NORTH CAROLINA	1	2	5035	4.2	208	1	3	5520	227	1	6104	232	
		OKLAHOMA	1	2	7965	4.4	347	1	8	8030	312	2	9576	377	
	76507	PENNSYLVANIA	35	101	8971	4.3	381	17	8	9465	385	2	9221	375	
		IOWA	1	2	10035	4.4	442								
		MARYLAND	2	7	7255	3.9	285	2	17	8671	347	3	8485	346	
	77364	PENNSYLVANIA	8	11	8825	4.1	359	7	11	9293	392	1	9302	386	
		MARYLAND	1	1	13050	3.8	499	1	39	11000	439	1	9548	395	
		NORTH CAROLINA	2	3	12108	3.8	456	2	7	7370	305	1	7260	294	
		GEORGIA	1	1	7120	4.1	292								
	79185	NEW JERSEY	1	3	7723	4.6	553								
		PENNSYLVANIA	81	158	8928	4.1	370	69	11	9235	382	2	9531	390	
		DELAWARE	2	4	10584	4.2	440	2	9	10049	402	2	9687	384	
		MARYLAND	8	13	9431	4.2	399	8	16	9473	388	2	8918	372	
		VIRGINIA	2	3	6888	3.9	264	1	1	10360	449	2	7450	319	
	93233	NEW YRK	1	2	8785	4.7	417	1	10	9215	364	1	8393	327	
		NEW JERSEY	2	3	8445	4.3	363	2	12	8298	375	2	9740	422	
		PENNSYLVANIA	184	275	8603	4.3	369	164	11	9270	380	1	9520	392	
		DELAWARE	23	25	8614	4.3	367	21	14	8686	348	1	9178	367	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		MARYLAND	30	39	9384	4.2	394	29	16	9246	373	1	10068	410
		FLORIDA	1	1	10380	3.9	403							
	94906	PENNSYLVANIA	7	7	5840	4.6	260	6	8	8003	323	1	9628	400
GUER	233381	PENNSYLVANIA	31	135	7710	5.0	380	17	9	8726	408	2	8635	408
		MARYLAND	3	8	7364	5.0	367							
		WEST VIRGINIA	1	1	7070	4.9	347							
	246072	RHODE ISLAND	1	3	6150	4.7	288	1	20	7190	344	2	7064	335
		PENNSYLVANIA	77	229	7287	4.6	335	26	7	8581	402	2	8461	399
		MARYLAND	4	7	5879	4.8	280	1	8	9283	454	4	8807	443
	250161	PENNSYLVANIA	7	23	6999	5.0	348	2	6	7529	363	2	8216	396
		DELAWARE	1	2	5565	4.6	261							
		MARYLAND	2	7	6465	5.3	341							
	258443	PENNSYLVANIA	11	33	7704	4.8	370	4	13	9131	414	3	9668	451
	259088	PENNSYLVANIA	149	396	7979	5.0	395	143	12	8506	393	2	8634	403
	261966	NEW JERSEY	1	3	9127	4.8	442							
		PENNSYLVANIA	196	521	7200	4.9	351	80	8	8317	383	2	8250	385
		DELAWARE	1	2	8590	4.5	394	1	6	8025	395	1	8622	410
	263151	RHODE ISLAND	1	6	6993	4.8	331	1	17	7910	372	5	7545	354
		NEW JERSEY	2	6	7484	5.3	390							
		PENNSYLVANIA	147	483	7654	5.0	382	81	16	8525	394	3	8774	409
		DELAWARE	1	2	6510	5.6	365	1	6	7530	355			
		MARYLAND	1	1	7580	4.5	338							
		VIRGINIA	1	4	9305	5.1	477							
	263404	PENNSYLVANIA	11	26	6732	4.8	322	3	9	8874	396	2	9347	405
		VIRGINIA	3	10	7778	4.5	346	1	7	8803	411	4	6922	320
	270694	PENNSYLVANIA	11	27	7135	4.8	343	6	11	8149	384	2	8002	383
	273047	PENNSYLVANIA	22	51	7341	4.6	336	5	15	7617	375	2	8469	421
		FLORIDA	1	1	9850	3.8	376							
	289234	PENNSYLVANIA	4	13	7273	5.1	367	1	9	9382	450	2	9271	443
	290518	PENNSYLVANIA	99	254	7661	4.7	362	95	13	8507	395	2	8592	403
		ILLINOIS	2	2	7155	4.8	333							
		MICHIGAN	1	1	9780	4.6	450							
		WISCONSIN	12	38	7847	4.6	361	9	12	8417	386	2	9005	411
		MINNESOTA	2	2	5980	5.0	296							
		DELAWARE	2	4	7197	5.1	363	2	8	7937	377	2	8944	420
		MARYLAND	1	2	8125	5.4	435	1	11	8855	445	1	8513	419
		FLORIDA	1	2	6870	5.0	346	1	34	8780	409	2	7799	372
	302965	RHODE ISLAND	2	4	8313	4.5	363	2	18	8020	367	2	7298	341
		PENNSYLVANIA	52	112	6816	4.8	327	28	13	8366	381	2	8343	386
		DELAWARE	1	2	7520	5.3	395	1	8	7815	372	1	8088	392
		MARYLAND	1	7	11030	5.3	587	1	14	9104	448	6	9114	450
	306475	PENNSYLVANIA	40	160	8316	4.9	407	21	11	9265	449	2	9533	470
		MARYLAND	2	6	6213	4.6	297	1	11	7813	393	4	7654	377
		WEST VIRGINIA	1	4	9503	4.5	431							
		FLORIDA	2	5	6507	4.2	266							
	309643	PENNSYLVANIA	4	19	7350	4.7	344	1	13	8100	377	3	7921	367
		VIRGINIA	1	1	8860	4.4	392							
	310263	NEW JERSEY	1	4	9018	3.7	336							
		PENNSYLVANIA	22	75	7433	4.9	357	9	11	8585	399	2	8234	383
	319572	PENNSYLVANIA	2	4	6373	5.5	343	2	9	11305	457	2	10552	445
	324257	PENNSYLVANIA	33	128	8405	4.8	403	22	27	8944	419	2	8816	409
		MARYLAND	1	6	11910	4.8	569	1	10	8450	417	2	8235	414
	332372	PENNSYLVANIA	93	237	8096	4.6	373	88	13	8500	385	2	8515	392
		DELAWARE	1	2	7765	5.0	389	1	18	9790	389	2	9500	382
	335746	PENNSYLVANIA	224	497	7928	5.0	395	215	13	8816	397	2	8903	408
		DELAWARE	1	1	6440	5.5	357	1	17	7530	376	1	6682	329
	345310	NEW JERSEY	1	4	8070	4.2	337					2	11004	424
		PENNSYLVANIA	243	616	7253	4.6	332	186	12	8201	378	2	8336	384
		MARYLAND	4	11	7730	4.4	343	3	10	8564	427	2	7978	391
	363214	PENNSYLVANIA	59	136	8076	4.6	372	45	11	8362	389	2	8434	395
		MARYLAND	7	20	8660	4.9	422	4	32	9900	490	3	9612	476

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
HOL.	364313	PENNSYLVANIA DELAWARE	19 1	31 1	7846 7570	5.0 4.6	392 348	19 1	17 12	8148 12340	387 501	2 1	8106 12088	379 450
	367330	PENNSYLVANIA DELAWARE FLORIDA	337 7 1	670 9 3	7535 6209 8420	4.6 4.4 4.1	347 270 348	334 7 1	15 13 46	8644 7914 9060	393 360 404	2 1 3	8737 8250 8436	400 381 379
	377661	PENNSYLVANIA DELAWARE	19 1	49 2	6645 9045	4.8 4.9	318 436	10 1	10 6	8341 10560	379 421	2 2	8939 9919	403 382
	380723	PENNSYLVANIA MARYLAND	12 1	32 1	7700 9370	5.0 5.6	387 526	6 1	12 9	8590 9780	386 421	3 1	8671 9483	389 392
	381430	RHOE ISLAND PENNSYLVANIA DELAWARE	3 65 1	9 150 3	8050 7079 6220	5.4 4.8 4.7	435 336 290	1 20 1	3 11 9	11902 8258 8167	511 377 406	2 1 1	9772 8129 8088	433 374 392
	389862	PENNSYLVANIA	60	73	6886	4.8	332	60	15	8384	365	1	9209	403
	391225	VERMONT NEW JERSEY PENNSYLVANIA INDIANA DELAWARE MARYLAND VIRGINIA MISSISSIPPI	1 2 458 1 5 5 1 1	1 6 1096 1 11 14 2 2	8740 8613 7754 5460 6435 7963 9485 7225	5.4 4.7 4.8 5.6 4.7 4.6 5.7 4.8	470 405 371 305 296 370 545 349							
	394764	PENNSYLVANIA	45	64	6402	4.9	313	45	15	8755	388	1	9472	424
	399226	PENNSYLVANIA	51	79	6351	4.5	284	51	14	8812	389	2	8659	382
	417736	PENNSYLVANIA DELAWARE MARYLAND	59 2 1	120 2 2	7452 6330 7230	4.6 4.6 4.8	339 289 347	52 2 1	12 10 4	8485 9070 8820	389 472 452	2 1 2	8577 8448 8791	389 439 436
	420224	NEW YORK PENNSYLVANIA MARYLAND	1 148 1	1 308 2	8130 7136 6985	5.1 4.9 5.2	414 349 359	139 1	11 8	8342 10810	381 445	2 2	8427 9363	391 382
	425918	PENNSYLVANIA	21	56	7153	4.8	343	19	13	8518	388	3	8664	398
	440675	PENNSYLVANIA	113	153	7848	4.4	346	113	13	8785	382	1	9362	410
	446105	PENNSYLVANIA	3	3	5100	4.3	221	3	14	9563	411	1	10835	447
	449674	PENNSYLVANIA DELAWARE	89 1	185 1	7478 6680	4.9 4.1	362 273	85 1	13 9	8230 8330	380 321	2 1	8696 8088	403 362
	452075	PENNSYLVANIA	1	1	2640	4.7	125	1	3	7880	329	1	12306	462
	459468	PENNSYLVANIA	27	65	8071	5.0	404	26	15	8587	400	2	8777	409
	463096	PENNSYLVANIA	33	63	7510	5.0	375	33	13	8695	385	2	9063	410
	698505	NEW YORK PENNSYLVANIA DELAWARE MARYLAND VIRGINIA	1 142 2 4 1	1 375 5 19 3	13580 11401 11224 12895 12847	3.6 3.5 3.7 3.7 3.5	488 400 412 472 446							
	706640	PENNSYLVANIA MARYLAND	31 2	86 9	10306 10505	3.7 3.4	374 346	6 1	5 14	10509 8440	386 335	2 2	10375 9249	385 388
	749057	NEW JERSEY PENNSYLVANIA OHIO DELAWARE MARYLAND VIRGINIA WEST VIRGINIA	3 790 2 1 23 1 1	4 2248 8 1 56 1 2	8240 12014 12975 10580 12304 9790 13965	3.6 3.7 3.8 3.1 3.6 3.7 3.3	295 443 489 330 438 366 452	1 557 2 1 18	31 11 5 25 13	12070 11499 11596 10160 11215	431 432 434 376 410	1 2 1 1 2	10268 11676 12317 11362	383 440 474 421
	760856	NEW YORK NEW JERSEY PENNSYLVANIA DELAWARE MARYLAND VIRGINIA NORTH CAROLINA	1 2 527 1 3 1 2	1 7 1551 4 6 1 5	11050 12836 11482 8318 11548 7440 8972	3.5 3.4 3.6 3.2 3.4 3.5 3.4	383 434 406 269 392 258 309	303 1 1	13 10 10	11971 9048 10860	436 325 388	2 2 1	12084 7952 12339	443 282 455
	768210	NEW YORK PENNSYLVANIA	1 46	1 147	13360 11444	3.3 3.5	439 401	26	6	11915	432	2	11905	442
	769170	VERMONT MASSACHUSETTS	1 1	1 3	14880 12980	4.1 4.2	608 546	1 1	21 12	17520 13167	662 510	1 3	16623 13378	647 509

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECDRS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD			AV. FAT LB.
								ND.	RECDRS	MILK LB.	FAT LB.	RECORDS	MILK LB.	FAT LB.	
		NEW YORK	24	57	14799	3.8	565	14	18	14481	561	1	14743	559	
		NEW JERSEY	18	44	14405	3.8	550	7	15	13928	534	1	13817	535	
		PENNSYLVANIA	2758	7326	12053	3.8	454	2363	11	11680	445	2	11980	456	
		OHIO	6	21	13707	3.9	535	5	6	13278	481	2	14199	522	
		INDIANA	2	2	13790	3.5	480	2	11	14680	552	1	13064	497	
		WISCONSIN	1	1	12860	3.4	444	1	4	11150	437	1	13472	472	
		DELAWARE	9	21	11140	3.9	432	8	6	9959	379	1	9080	347	
		MARYLAND	103	242	12845	3.8	491	88	16	12564	474	2	12772	493	
		VIRGINIA	6	16	12100	4.0	481	3	40	14100	541	1	13740	525	
		WEST VIRGINIA	2	6	12734	3.5	441	1	13	9930	399	1	12884	473	
		NORTH CAROLINA	7	22	10680	3.9	414	7	24	10843	392	3	11238	413	
		SOUTH CAROLINA	2	6	9004	3.8	345								
		GEORGIA	3	9	15259	3.6	535	3	6	13398	463	2	12646	453	
		PUERTO RICO	2	2	6355	3.7	235	2	14	7785	262				
	772189	NEW JERSEY	1	3	12610	3.4	436								
		PENNSYLVANIA	528	1285	10857	3.7	396	353	11	11300	430	2	11363	429	
		OHIO	1	5	9250	3.8	354	1	7	10868	398	2	8807	324	
		DELAWARE	1	3	10547	3.8	399	1	13	10447	380	2	11140	403	
		MARYLAND	13	37	10133	3.6	363	10	11	11293	428	2	11561	444	
		VIRGINIA	1	4	15663	3.4	533					1	14944	561	
		NORTH CAROLINA	3	5	11899	3.4	405	2	11	11344	390	1	11549	400	
	776682	PENNSYLVANIA	26	79	12017	3.7	444	11	10	11856	448	3	11226	424	
	787014	NEW JERSEY	1	1	9940	3.6	361	1	10	12480	455	1	12393	452	
		PENNSYLVANIA	185	463	10355	3.8	387	57	9	11887	442	2	11812	446	
		MARYLAND	4	9	9172	3.6	347								
		VIRGINIA	1	3	8677	3.6	309								
		NORTH CAROLINA	1	2	7295	3.7	270								
		TEXAS	1	1	11660	3.1	360								
	791734	PENNSYLVANIA	30	101	10756	3.6	386	10	6	10983	404	2	10824	400	
	799845	NEW YORK	1	1	6900	3.8	260								
		PENNSYLVANIA	110	311	10074	3.6	361	38	13	11756	443	2	11704	440	
		MARYLAND	1	5	10234	3.6	364	1	16	10982	389	2	11402	412	
		VIRGINIA	1	2	6710	3.5	236								
	818459	NEW YORK	1	2	11180	3.7	411								
		NEW JERSEY	1	1	9080	4.1	370								
		PENNSYLVANIA	97	235	10861	3.6	394	57	9	11297	424	2	11474	433	
		DELAWARE	2	7	10556	3.8	400	2	10	11764	448	3	11779	460	
		MARYLAND	1	2	9245	3.5	324	1	8	9935	367	1	9679	351	
		VIRGINIA	1	1	10730	3.5	375								
	820715	PENNSYLVANIA	4	14	9122	3.7	340	1	12	8185	323	2	8012	315	
	825905	PENNSYLVANIA	27	91	12451	3.4	418	9	6	11657	432	2	11470	441	
		MARYLAND	1	5	11592	3.5	407	1	9	11392	425	2	11380	432	
	838760	PENNSYLVANIA	24	89	10276	3.6	366	4	6	10779	393	4	11561	423	
	844852	PENNSYLVANIA	45	134	12519	3.4	431	18	11	12049	461	2	12244	464	
		DELAWARE	1	1	12710	3.6	458								
	857269	NEW YORK	3	7	12838	3.9	502	2	25	13355	499	2	12890	478	
		NEW JERSEY	8	21	11708	3.6	426	1	10	14000	577	1	13472	544	
		PENNSYLVANIA	2083	5041	11548	3.8	432	1860	12	11461	435	2	11708	443	
		DELAWARE	18	34	12553	3.8	481	17	11	11601	450	2	11390	442	
		MARYLAND	147	397	11809	3.7	439	92	15	11731	443	2	11698	440	
		VIRGINIA	8	16	13446	3.7	502	2	15	14608	528	2	15141	554	
		SOUTH CAROLINA	1	1	12180	3.3	399								
		GEORGIA	2	3	14485	3.6	518	1	15	13350	466	1	13331	472	
		TENNESSEE	1	1	11630	3.6	418								
		ALABAMA	1	1	13480	3.5	475								
	859566	NEW YORK	1	2	11370	3.8	424	1	15	12355	453	2	12066	449	
		PENNSYLVANIA	153	387	10444	3.8	399	113	11	11443	429	2	11604	435	
		MARYLAND	7	22	11315	3.7	413	6	12	11060	417	2	11814	431	
		VIRGINIA	1	1	9100	4.0	365								
	867135	NEW JERSEY	2	5	12503	3.4	428	1	2	12970	495	1	12099	467	
		PENNSYLVANIA	435	1033	11593	3.7	423	416	12	11306	429	2	11526	436	
		OHIO	2	2	11955	3.7	438	1	28	10000	382	1	10431	373	
		DELAWARE	4	11	10287	3.7	381	4	13	10349	389	3	10541	385	
		MARYLAND	6	11	13078	3.5	458	2	13	12653	473	2	12669	462	
		VIRGINIA	2	2	11780	3.9	455	2	51	11370	428	1	12023	438	
	873082	PENNSYLVANIA	34	108	10145	3.6	364	19	16	11308	432	2	11783	443	
		DELAWARE	2	4	11470	3.8	424	2	10	11213	429	2	11702	443	
	880723	NEW YORK	2	6	11255	4.3	484	1	6	13757	557				
		NEW JERSEY	3	4	10378	4.4	449								
		PENNSYLVANIA	1016	2144	10553	4.3	451	991	13	11519	440	2	11702	448	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREEO	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		OHIO	2	6	10127	4.2	428	2	14	11072	407	1	9788	362
		MICHIGAN	2	3	12010	4.2	495	1	13	14695	553	2	14394	544
		DELAWARE	5	6	8852	4.3	379	5	8	10770	398	1	10580	407
		MARYLAND	29	70	10924	4.4	479	27	12	12114	453	2	11913	448
		VIRGINIA	2	2	9970	4.4	436							
		GEORGIA	1	1	7180	4.3	310	1	10	7600	269	1	7434	277
881761		PENNSYLVANIA	2	2	9855	3.4	335							
		WISCONSIN	1	1	13840	3.0	417							
888511		PENNSYLVANIA	211	496	11022	3.7	407	177	12	11469	431	2	11574	434
		DELAWARE	1	2	11220	3.5	386	1	8	11360	393	1	9112	308
		MARYLAND	7	25	12301	3.5	422	5	14	10382	383	2	10429	382
		GEORGIA	1	4	14588	3.1	442	1	3	13248	465	2	7930	324
888689		NEW YORK	2	4	15728	3.7	581	2	25	13925	522	2	13661	508
		NEW JERSEY	4	6	14611	4.0	579	3	13	14093	543	1	13091	500
		PENNSYLVANIA	1029	2042	11672	3.8	441	1005	14	11507	442	2	11816	453
		OHIO	1	3	11727	3.6	418	1	13	10883	402	1	9483	353
		DELAWARE	14	20	12544	3.8	472	14	17	11893	450	1	11825	455
		MARYLAND	24	53	12362	3.8	465	23	14	12810	478	2	12567	473
		VIRGINIA	2	2	14235	3.6	507	1	10	12580	478			
		GEORGIA	1	2	13745	3.4	469	1	13	13745	492	1	15434	538
896304		NEW JERSEY	1	2	13530	3.6	482							
		PENNSYLVANIA	326	798	11972	3.5	416	131	8	11515	432	2	11600	436
		OHIO	1	4	12030	3.9	471							
		DELAWARE	1	4	11468	3.3	378	1	6	10243	389	1	8360	335
		MARYLAND	5	14	11227	3.4	381	2	18	10967	411	2	11124	423
		VIRGINIA	2	4	10314	3.4	348							
913988		NEW YORK	3	6	12347	4.4	544	1	8	14720	551	1	14846	567
		NEW JERSEY	1	1	10530	4.2	438							
		PENNSYLVANIA	1423	2491	11126	4.2	464	1390	15	11507	442	2	11898	460
		OHIO	1	1	15080	3.1	465	1	13	11390	406			
		DELAWARE	38	56	11425	4.1	463	35	15	11685	443	2	11658	446
		MARYLAND	60	98	11578	4.2	480	58	13	11945	457	2	12062	459
		VIRGINIA	4	5	12175	4.1	486	3	24	13595	532	1	14960	565
		NORTH CAROLINA	3	5	9155	4.4	400	3	56	10920	404	2	11178	411
936055		PENNSYLVANIA	15	28	11442	3.9	446	14	12	11137	426	2	11815	445
		MARYLAND	1	1	13540	3.7	495	1	6	13260	468			
947319		NEW YORK	1	1	9830	3.8	372							
		NEW JERSEY	1	5	12728	4.0	510							
		PENNSYLVANIA	89	223	10889	3.7	403	74	11	11181	429	2	11345	431
		KANSAS	1	1	13290	3.8	504							
		DELAWARE	1	2	11240	4.2	473	1	18	9585	384	2	9500	382
		MARYLAND	1	3	10720	3.4	363	1	10	12607	467	2	11194	400
959121		NEW YORK	2	3	13373	4.3	568	2	31	14658	543	2	13661	508
		NEW JERSEY	2	2	10620	4.0	418	2	11	11540	433	1	12519	462
		PENNSYLVANIA	430	735	11116	3.9	437	424	15	11919	459	2	12294	476
		DELAWARE	20	34	11185	3.9	435	20	12	11769	455	2	11914	458
		MARYLAND	22	31	12124	3.9	470	22	16	12966	477	1	12476	467
		NORTH CAROLINA	4	4	10845	3.8	401	4	15	9178	358	1	10388	403
977110		VERMONT	1	1	8840	4.0	358							
		NEW YORK	19	35	12120	3.9	470	10	23	13392	491	2	12922	470
		NEW JERSEY	16	28	12785	3.9	490	12	11	13321	505	2	13501	511
		PENNSYLVANIA	3449	6479	11124	3.9	429	3397	13	11673	448	2	11920	457
		OHIO	7	8	10414	3.7	390	7	18	11519	425	1	10431	373
		INDIANA	1	1	14020	4.1	573							
		DELAWARE	21	30	10872	3.6	411	21	10	11479	432	1	11580	439
		MARYLAND	170	286	12326	3.9	477	162	18	12699	482	2	12462	472
		VIRGINIA	17	24	10703	3.8	402	13	31	11272	435	1	11220	452
		WEST VIRGINIA	5	6	10736	3.7	399	5	18	12067	454	1	12673	466
		NORTH CAROLINA	10	18	10794	3.9	419	10	21	11599	420	2	12120	430
		TENNESSEE	1	1	8060	3.8	306							
1016950		NEW JERSEY	6	20	13951	3.7	514	2	8	13598	525	2	12705	498
		PENNSYLVANIA	848	1440	11544	3.8	439	814	15	11387	440	2	11823	455
		WISCONSIN	1	1	9730	3.6	347	1	10	11150	423			
		DELAWARE	13	13	10447	3.8	402	8	17	11109	410	1	11290	432
		MARYLAND	18	35	14371	3.9	555	17	15	12799	498	2	12526	483
		WEST VIRGINIA	1	1	10630	3.7	390							
		NORTH CAROLINA	1	1	12750	3.8	478	1	43	9430	338	1	9777	335
		GEORGIA	1	1	16030	3.8	610	1	3	14110	511	1	16197	577
1060223		NEW JERSEY	1	1	11470	3.7	426							
		PENNSYLVANIA	659	969	11763	3.9	455	641	15	11308	436	1	11820	457
		DELAWARE	4	4	10515	3.8	394	4	10	10145	414	1	9810	397
		MARYLAND	10	11	14277	3.7	536	9	14	12541	480	1	12762	486
		VIRGINIA	1	1	9090	3.6	524	1	27	10920	415	1	11543	452
		NORTH CAROLINA	1	1	10630	3.5	368	1	35	10090	345	1	10431	361

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	YEARLY HERD NO.	MILK LB.	FAT LB.
	1075610	NEW JERSEY	1	1	8650	4.4	383	1	53	9250	365	1	10856	428
		PENNSYLVANIA	119	162	12033	4.0	480	117	16	11902	457	1	12346	475
		MARYLAND	1	1	9680	3.8	364	1	21	12430	463			
	1086326	RHODE ISLAND	1	2	13945	3.8	523	1	4	12745	465	2	11636	427
		NEW YORK	1	1	13170	3.8	496							
		PENNSYLVANIA	329	513	12237	3.9	474	324	16	11737	452	1	12279	470
		DELAWARE	4	6	11173	3.8	424	3	14	10715	410	2	11336	415
		MARYLAND	7	11	12931	3.9	508	7	13	12061	464	1	11777	446
		NORTH CAROLINA	2	2	10690	3.7	393	2	49	8990	344	1	9271	365
	1099477	CONNECTICUT	2	2	12960	4.1	538	2	19	10975	393	1	10770	397
		NEW YORK	1	1	13820	3.5	480	1	28	15870	589	1	13723	518
		NEW JERSEY	3	4	10260	4.3	440	3	38	10913	421	2	12334	477
		PENNSYLVANIA	1284	1667	12240	3.9	479	1269	16	11698	453	1	12330	476
		DELAWARE	22	25	12205	3.6	457	22	19	11010	425	1	11546	444
		MARYLAND	17	19	12097	3.7	442	15	15	12597	470	1	12481	467
		GEORGIA	1	2	13265	3.8	497	1	19	9855	395	2	9772	411
	1109864	CONNECTICUT	1	1	8890	4.6	408	1	17	9850	381	1	10922	402
		NEW YORK	2	2	13245	4.0	526	2	6	13765	528	1	15239	578
		NEW JERSEY	5	6	11214	3.8	428	4	19	13563	510	1	13657	519
		PENNSYLVANIA	1102	1279	11319	4.1	462	1095	15	11795	454	1	12329	476
		DELAWARE	18	23	11966	4.0	473	18	15	10988	426	1	11580	455
		MARYLAND	22	25	12120	4.0	481	21	12	12920	500	1	12627	479
		GEORGIA	1	1	12780	4.1	528	1	84	12890	474	1	13156	484
	1122266	MASSACHUSETTS	1	1	10170	4.3	435	1	1	19300	649	1	15979	609
		CONNECTICUT	1	1	11880	3.6	426	1	24	10610	399	1	10617	391
		NEW YORK	1	1	15820	3.7	560	1	11	15220	577	1	14977	555
		PENNSYLVANIA	567	698	11122	3.9	432	560	15	11420	441	1	11952	463
		DELAWARE	10	12	11306	4.0	446	10	15	11002	439	1	11689	462
		MARYLAND	5	6	13184	3.9	508	3	7	11692	459	1	13195	508
		WEST VIRGINIA	3	3	13087	3.8	506	3	4	12377	467	1	14355	542
	1122267	PENNSYLVANIA	52	79	10531	3.6	380	52	14	11102	422	1	11376	426
		MARYLAND	1	1	19380	4.1	786	1	8	10680	436	1	12797	530
	1123923	PENNSYLVANIA	26	47	11180	3.9	436	26	15	11793	451	2	11940	449
		MARYLAND	2	5	12707	4.3	538	2	7	11179	420	4	11740	492
	1151311	NEW YORK	2	2	11335	4.2	471	2	33	12800	477	1	11838	445
		NEW JERSEY	4	4	13293	4.0	536	4	16	13518	524	1	13925	533
		PENNSYLVANIA	545	793	11234	3.9	432	540	15	11628	446	1	12073	465
		DELAWARE	14	18	11320	3.7	418	14	23	11712	428	1	11782	426
		MARYLAND	17	24	12075	3.7	444	16	19	12686	468	1	12924	479
		NORTH CAROLINA	2	2	12200	3.6	440	2	19	11620	424	1	12933	460
	1153271	PENNSYLVANIA	1	1	12790	3.8	485	1	15	9710	396	1	10780	449
	1154271	NEW JERSEY	1	2	14695	3.4	497	1	10	12515	447	1	13331	481
		PENNSYLVANIA	65	96	11494	3.7	423	63	15	11372	432	1	11830	453
		DELAWARE	1	2	10025	3.4	345	1	7	12920	512	1	10682	410
		MARYLAND	2	3	10515	4.2	435	2	15	12475	467	2	12993	485
	1157986	CONNECTICUT	2	2	18455	3.3	610	2	14	10440	369	1	11118	409
		PENNSYLVANIA	268	271	12207	3.8	458	261	15	11835	456	1	12543	484
		DELAWARE	2	2	14326	3.9	555	2	18	11660	436	1	12388	462
		MARYLAND	2	2	14090	3.4	481	2	13	12670	468	1	13293	485
		WEST VIRGINIA	1	1	10250	3.4	348	1	2	11710	406	1	10965	405
		GEORGIA	1	2	5765	3.8	230	1	9	9555	367	2	12410	460
	1226781	NEW YORK	1	1	12670	3.8	485							
		PENNSYLVANIA	167	275	11275	3.6	429	166	16	11769	455	2	12221	471
		DELAWARE	2	5	13124	3.6	466	2	49	12690	455	3	12492	440
		MARYLAND	8	12	11501	3.7	426	6	11	12578	474	1	12546	476
	1243106	PENNSYLVANIA	80	125	12615	3.9	487	79	14	11932	458	2	12296	473
		DELAWARE	1	1	9800	3.8	372	1	9	9870	374	1	9930	363
	1276959	NEW YORK	1	1	12660	3.4	433	1	2	13030	486	1	17822	634
		PENNSYLVANIA	14	14	11874	3.7	445	13	13	12148	474	1	12678	493
JER.	381057	PENNSYLVANIA	34	94	7189	5.4	386	3	4	7510	403	2	7233	401
	411915	PENNSYLVANIA	12	22	6447	5.3	339	1	7	8865	442			
	427749	PENNSYLVANIA	54	130	8312	5.1	420	24	15	7900	427	2	8446	444
		DELAWARE	3	3	6010	5.4	324							
	440119	PENNSYLVANIA	6	12	6914	5.3	365							
	440997	PENNSYLVANIA	17	44	7323	5.6	404	6	21	8049	413	3	7646	391
		NORTH CAROLINA	4	7	7263	5.3	379	2	4	6144	288	2	6804	302

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY NO. RECORDS	MILK LB.	AV. FAT LB.	YEARLY HERD NO.	MILK LB.	AV. FAT LB.
	442023	PENNSYLVANIA	7	14	8684	5.4	465	2	8	9225	463	3	9699	481
	444308	PENNSYLVANIA	18	45	7550	5.4	404	2	5	8843	435	1	9058	433
	461727	PENNSYLVANIA	11	26	7254	5.3	382							
	462535	PENNSYLVANIA	4	8	7210	5.0	360	2	25	8360	449	1	8502	430
	466750	PENNSYLVANIA	17	50	7433	5.2	381	5	5	8143	410	2	7769	404
	472924	PENNSYLVANIA	16	24	7811	5.2	403	7	18	7953	426	1	7729	431
	481185	PENNSYLVANIA OREGON	16 1	46 1	7233 7780	5.5 5.4	395 420	4	10	7658	360	1	7365	362
	484840	PENNSYLVANIA DELAWARE	36 1	72 2	7346 9430	5.4 5.8	390 544	19 1	13 65	8053 8630	425 483	2 2	8234 8873	435 487
	491730	PENNSYLVANIA MARYLAND	41 1	106 1	7382 6110	5.4 5.1	396 309	15 1	8 9	7849 6740	407 355	2 1	8273 5962	427 303
	499130	PENNSYLVANIA DELAWARE	70 9	102 16	8140 7157	5.4 5.5	437 392	39 8	16 25	8175 7814	415 415	2 2	8302 7773	433 400
	525046	PENNSYLVANIA DELAWARE MARYLAND	58 9 1	81 19 2	8082 8193 6740	5.2 5.3 5.7	414 437 386	29 7	15 19	8245 7644	434 407	2 2	8527 7956	452 421
	526669	PENNSYLVANIA	10	17	7249	4.9	357	5	12	8128	422	1	7750	386
	526819	OHIO	7	10	10071	5.1	511	5	6	9086	462	1	9764	502
	526919	NEW JERSEY PENNSYLVANIA MINNESOTA DELAWARE MARYLAND	5 149 1 12 2	6 228 1 25 3	10883 8229 7040 8292 6213	5.7 5.3 5.1 5.4 5.3	624 435 356 448 333	5 83 1 12 2	41 16 2 23 17	9536 8338 6450 7438 5233	501 426 356 388 266	1 1 1 2 2	9952 8563 10137 7989 6579	539 450 524 420 327
	532704	PENNSYLVANIA	3	3	7470	5.0	378	2	7	10230	516	1	9014	471
8.S.	114959	PENNSYLVANIA MARYLAND	9 1	9 1	10673 7960	4.1 4.1	439 324	8	6	11563	491	1 1	10941 9657	467 388
009 HOL.	958782	PENNSYLVANIA OHIO MARYLAND NORTH CAROLINA	77 1 3 1	201 1 6 3	11675 12740 12472 9587	3.5 3.4 3.6 3.6	413 433 441 355	55 1 2	10 28 8	11956 10090 9455	447 386 365	2 1 1	11869 10431 9679	444 373 351
JER.	456846	PENNSYLVANIA	1	2	7895	5.8	448	1	6	8400	455	2	8421	459
	456946	PENNSYLVANIA DELAWARE MARYLAND	64 2 1	112 2 1	7443 6705 8780	5.5 5.6 5.3	406 373 462	29 1 1	16 15 17	8523 7150 8640	435 365 413	1 1 1	8511 6911 8022	445 376 382

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED		SIRE NO.	RECDRDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPDRARY AV.			YEARLY HERD AV.			
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
014	GUER	303094	WISCONSIN IOWA	18 1	36 1	7734 7870	4.7 4.7	358 374	1	8	8878	417	2	8023	393

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.			YEARLY HERO AV.				
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	
000	GUER.	209432	OHIO	1	5	7284	4.7	338								
		259542	NEW JERSEY OHIO	1 1	2 1	5540 8090	4.8 4.6	262 375								
	HOL.	787641	NEW YORK OHIO VIRGINIA	2 13 1	6 36 1	9832 10188 8250	3.6 3.7 3.3	354 376 269	1	5	12637	440	1	12491	438	
		787642	OHIO INDIANA	13 1	28 1	11454 9380	3.5 3.6	407 358	1	8	10368	368	1	9974	378	
	JER.	357879	PENNSYLVANIA OHIO MICHIGAN SOUTH DAKOTA	1 7 2 1	1 17 6 2	6220 7608 7909 5060	4.6 5.4 4.8 5.9	286 409 382 296	3	5	7556	392	2	8331	430	
		402722	OHIO	7	7	8956	5.0	446								
	001	AYR.	55013	OHIO INDIANA TENNESSEE	3 1 1	5 2 2	9775 5290 9535	4.0 4.7 4.0	398 249 383	1 1	2 5	9170 8940	370 367	2 2	8764 10388	312 412
			57766	OHIO	6	13	9715	3.9	378	1	2	12327	501	1	11587	470
			58028	OHIO INDIANA	7 1	11 7	9560 11230	4.0 3.9	386 437	1 1	6 7	6680 9146	253 360	1 3	10039 10264	362 419
			58118	OHIO	5	16	9798	4.2	404	1	6	11108	441	3	11387	462
58179			OHIO INDIANA KANSAS KENTUCKY	12 3 1 2	24 4 5 6	10072 8832 12144 10503	3.9 4.0 3.9 3.8	396 346 477 406	2 1 1	10 5 16	9665 10330 9343	373 440 357	1	9925	399	
66191			OHIO INDIANA ILLINOIS	22 1 1	59 3 3	9933 10460 8040	4.2 3.8 4.2	413 401 343	2 1 1	4 1 9	10289 7730 7900	400 452 327	2 3	11249 8393	452 339	
70151			MASSACHUSETTS OHIO INDIANA TEXAS	1 12 3 1	1 32 5 3	5810 8735 10130 6527	4.6 4.0 3.7 3.7	269 345 376 244	1 6 2	6 5 7	5840 9769 9760	247 394 387	1 3 2	5842 9590 9813	250 378 380	
72466			OHIO INDIANA KENTUCKY	13 1 2	25 3 2	8681 8333 6305	3.9 3.9 4.4	339 322 273	11 2	4 2	9638 6660	385 264	2	8987	355	
72478			CONNECTICUT OHIO	1 6	2 14	7230 8891	4.0 4.2	290 378	1 2	6 3	10640 8867	437 360	2 1	10366 8819	425 377	
72651			PENNSYLVANIA OHIO INDIANA MICHIGAN WEST VIRGINIA ALABAMA OKLAHOMA	1 51 5 2 1 1 1	1 111 16 2 1 4 2	9980 9426 10015 6485 9800 7190 5775	4.2 4.0 4.2 3.9 4.0 3.9 4.2	420 381 419 252 390 283 243	1 24 5 2	6 6 3 3	9560 9573 10099 10050	430 383 433 319	1 2 2	8829 9638 10254	376 384 402	
72906			NEW YORK OHIO INDIANA ILLINOIS MICHIGAN SOUTH CAROLINA GEORGIA ALABAMA OKLAHOMA	1 53 4 1 4 1 1 1 1 5	2 126 10 6 8 1 1 1 6	10965 9580 7645 9393 10081 9330 8030 5090 8144	3.8 4.0 4.5 3.7 4.0 4.7 4.0 4.6 4.0	418 384 341 350 405 441 321 236 326	18 4 1	7 3 17	9621 9446 9308	381 373 385	1 2 5	9371 10266 9102	362 408 376	
74617			OHIO OKLAHOMA	9 1	16 1	9697 12200	4.3 3.6	415 444	3	4	11317	470	1	11652	516	
74911			NEW YORK PENNSYLVANIA OHIO INDIANA NORTH CAROLINA OKLAHOMA WASHINGTON	2 1 72 5 4 2 1	3 2 161 14 6 2 1	8680 8135 10142 8932 8389 10255 8810	4.2 4.3 4.0 4.0 4.4 4.3 4.6	361 346 407 356 363 438 407	1 1 46 4 3	5 12 6 5 7	9310 9760 9619 8948 8580	393 425 383 367 347	1 2 3 3	10965 9682 9336 8553	463 387 367 340	
77328			OHIO INDIANA MICHIGAN MARYLAND	46 1 1 1	78 3 3 2	10223 10355 10790 8140	4.1 4.1 4.1 3.9	418 422 437 318	30 1 1 1	9 6 22 9	9981 10507 10340 9060	399 422 420 350	2 2 2 1	9994 8361 10459 10344	393 327 427 399	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	YEARLY HERD RECORDS NO.	MILK LB.	FAT LB.
		NORTH CAROLINA	2	2	7075	3.7	265							
		OKLAHOMA	1	1	10310	4.5	459							
	78287	OHIO	56	109	9041	4.2	381	36	7	10156	406	2	9707	385
		INDIANA	3	4	9670	4.1	399	1	4	7960	316	1	8317	319
		VIRGINIA	1	1	8130	4.3	350							
		NORTH CAROLINA	1	2	9440	3.9	368	1	29	7045	287	2	8862	367
		OKLAHOMA	4	4	9295	4.4	412							
	79013	OHIO	7	16	9425	4.2	389	5	7	10254	403	2	8921	361
	81598	OHIO	5	8	10405	3.9	407	4	7	9705	388	2	9672	400
		OKLAHOMA	1	1	9220	4.4	409							
	84424	OHIO	20	21	9570	4.0	379	12	11	9873	387	1	10928	415
		NORTH CAROLINA	6	8	8829	3.9	344	4	36	8495	340	1	7815	317
	84598	OHIO	71	133	9843	4.1	403	40	8	9537	384	1	9683	383
		INDIANA	2	3	10663	4.0	418							
		ILLINOIS	1	3	7613	4.0	305	1	1	8210	304			
		MICHIGAN	3	8	11504	4.0	456	3	15	10808	439	2	11394	457
		WISCONSIN	2	3	10338	4.2	425	2	4	10015	435	2	11462	473
		NORTH CAROLINA	4	4	11350	4.0	449	4	14	10240	411	1	9915	405
		GEORGIA	2	6	9404	3.8	353	2	13	7957	306	1	8671	338
		ALABAMA	2	2	9515	3.6	336	2	37	7415	280	1	7957	302
		MISSISSIPPI	1	1	8190	3.9	321	1	50	7260	314	1	7935	341
		OKLAHOMA	3	3	9897	4.3	426							
	87190	OHIO	26	36	9322	3.9	359	12	7	9586	377	1	9507	387
		NORTH CAROLINA	2	3	5668	4.5	250	2	19	8610	353			
		OKLAHOMA	2	2	12600	4.4	550							
	88098	OHIO	39	56	9681	4.2	410	23	9	10180	396	1	10091	402
		INDIANA	2	3	10368	4.6	480	2	7	8950	367	2	9952	406
		NORTH CAROLINA	10	10	10005	4.1	417	10	17	9182	370	1	8558	345
		GEORGIA	2	2	8285	4.1	338	2	13	6915	259	1	7401	291
		FLORIDA	1	1	7420	4.1	301							
		ALABAMA	1	1	9320	4.0	377	1	60	7240	273	1	7979	302
	90392	OHIO	10	19	8772	4.1	356	9	7	9353	376	2	9530	378
		INDIANA	2	5	9675	3.9	373	1	5	10200	436			
		NORTH CAROLINA	3	4	8297	3.9	323	3	42	8685	353	1	9063	344
	92422	OHIO	42	50	9687	4.2	401	32	13	9611	385	1	10047	394
		ILLINOIS	4	4	10845	4.2	457	3	14	10300	456	1	9999	433
		MICHIGAN	6	7	11930	4.2	498	6	23	10652	450	1	11702	484
		WISCONSIN	16	21	10635	4.4	470	13	18	10159	412	1	9923	411
		MINNESOTA	6	8	10143	3.9	399	6	15	10566	409	1	9168	390
		IOWA	4	4	10413	4.0	413	4	8	11145	446	1	9919	397
		MARYLAND	1	2	10370	4.6	477	1	84	11590	473	1	13058	508
		WEST VIRGINIA	5	5	10302	4.2	435	5	22	10102	401	1	11412	459
		NORTH CAROLINA	9	9	9050	4.0	362	9	19	9147	361	1	8825	354
		GEORGIA	2	3	11760	4.1	474	2	5	9438	377	1	9941	385
		MISSISSIPPI	1	1	11200	3.8	429	1	50	7200	312	1	7935	341
		OKLAHOMA	2	2	10245	4.4	447	2	9	10200	397			
		COLORADO	1	1	9360	4.4	410	1	3	6960	298			
		OREGON	1	1	9250	4.5	419	1	33	11080	414			
	94562	OHIO	15	18	9452	4.1	388	11	17	10085	385	1	9733	378
		MICHIGAN	1	1	7770	4.7	363	1	34	10690	444	1	11750	484
		MARYLAND	1	2	10660	4.4	464	1	138	12160	491	2	12066	478
		NORTH CAROLINA	2	2	8010	4.0	319	2	49	7440	303	1	8033	325
	94852	NEW YDRK	3	5	10252	4.2	429	2	119	9810	415	2	10029	435
		OHIO	69	75	10219	4.0	409	52	11	9826	392	1	10079	402
		INDIANA	3	3	9060	4.2	379	3	3	8097	358	1	9076	377
		ILLINOIS	3	3	10180	4.3	432	3	10	9660	416	1	10344	451
		WISCONSIN	4	7	9993	4.2	417	4	18	9889	395	1	9349	378
		IOWA	17	23	9638	4.1	396	17	8	10905	450	1	9304	429
		MARYLAND	1	1	12600	4.6	578	1	139	12130	490	1	11074	447
		NORTH CAROLINA	10	11	9582	4.2	400	10	29	9483	396	1	9415	389
		ALABAMA	1	1	8490	3.8	323	1	43	7860	304	1	7979	302
		MISSISSIPPI	1	1	2390	3.6	86	1	5	4580	154			
		WASHINGTON	2	3	10775	3.9	424	2	10	10420	413	2	11418	437
		OREGON	1	1	9640	4.4	427	1	2	12450	449	1	12132	465
	96189	OHIO	2	2	7530	3.9	300	2	17	7720	315			
		WISCONSIN	2	2	10440	4.2	437	2	7	9695	427	1	10508	452
		NORTH CAROLINA	2	2	9700	4.1	393	2	8	10175	417	1	8426	343
GUER	256219	OHIO	3	7	7746	4.4	341							
	270892	OHIO	18	35	7296	4.6	349	11	9	7851	365	1	8321	367
		MARYLAND	1	1	6010	4.8	289							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAUS.	CONTEMPORARY NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	MILK LB.	AV. FAT LB.
	272377	OHIO	5	17	9194	4.5	410	2	15	8625	397	3	9082	415
		INDIANA	1	1	9920	4.8	474							
	285563	OHIO	6	12	8066	4.7	378	4	5	8375	385	2	8225	371
		MISSOURI	1	5	9368	4.8	446							
	288783	NEW YORK	2	6	8490	4.9	422							
		PENNSYLVANIA	1	3	8697	5.1	450	1	7	8440	423	2	8273	413
		OHIO	39	97	8279	4.8	393	22	5	8593	384	2	8573	388
		INDIANA	1	1	10230	5.2	535							
	294378	OHIO	12	27	8244	4.5	372	8	5	8849	392	2	8660	375
	294755	NEW YORK	1	6	9968	4.8	478							
		NEW JERSEY	1	1	8610	4.7	408							
		OHIO	14	40	7894	4.8	376	4	4	9115	390	2	8936	400
		WEST VIRGINIA	2	3	7913	4.5	354							
	294792	OHIO	32	80	8887	4.7	413	11	7	10129	421	2	10020	428
		MISSISSIPPI	1	3	12187	4.7	573	1	41	10665	466	2	8399	396
	310787	OHIO	10	19	8183	4.9	399	3	8	7150	353	2	8783	435
		WEST VIRGINIA	1	6	9117	4.3	392							
	313544	OHIO	3	7	7125	5.4	383	3	6	8711	419	3	7941	390
		KENTUCKY	1	1	4070	4.3	175	1	4	6410	290	1	6736	305
	313721	OHIO	27	67	7685	4.6	352	17	7	8565	377	2	8556	387
		MISSISSIPPI	1	2	7500	4.3	320	1	9	7270	331	1	6420	284
	318787	OHIO	9	11	8210	4.5	368	7	9	8391	391	1	8339	373
	322433	OHIO	3	5	8002	4.7	382	2	10	10195	427	1	9678	440
	329727	OHIO	3	9	8092	4.6	366	3	10	7899	379	3	7687	358
	330093	NEW JERSEY	1	2	5945	4.6	274							
		PENNSYLVANIA	1	1	6430	4.9	312							
		OHIO	90	197	7326	4.7	342	70	7	8606	399	2	8340	390
	334282	NEW HAMPSHIRE	1	1	5330	4.2	226							
		PENNSYLVANIA	3	4	7310	4.9	360	3	15	8782	382	1	8628	366
		OHIO	130	260	7964	4.7	376	94	8	9068	403	2	8738	396
		INDIANA	7	18	7687	4.8	371	6	4	10020	436	3	8658	401
		MISSISSIPPI	2	7	7779	4.3	333	1	5	7363	307	1	7837	339
	338962	OHIO	3	5	8033	4.7	369	2	7	7745	361	1	8170	386
		INDIANA	1	1	7880	4.6	360							
	345079	OHIO	17	43	7922	4.8	382	16	7	8837	403	2	8747	401
	345312	OHIO	12	18	9040	4.4	394	7	10	10337	425	1	9519	402
		NORTH CAROLINA	1	2	10480	4.6	477	1	7	8765	443			
	366406	OHIO	33	75	8051	4.5	362	30	10	9434	405	2	9286	404
	366899	OHIO	48	94	7736	4.7	367	34	8	9124	392	2	9160	404
	367458	OHIO	8	11	8335	4.9	406	6	5	7842	357	1	8497	390
	370862	OHIO	36	81	7694	4.8	366	27	7	8604	392	2	8405	384
		INDIANA	1	1	9260	4.9	452	1	6	7710	358			
		TENNESSEE	1	2	7760	4.8	372							
	371529	OHIO	10	16	8417	4.9	407	9	6	9140	415	2	8691	407
	377681	OHIO	5	7	7590	4.7	354	4	6	8755	417	2	8313	400
		NEW MEXICO	1	3	7463	5.1	385	1	28	8590	418	1	9123	434
	380086	OHIO	1	2	6330	4.8	309	1	8	12140	437	2	11500	410
	383573	OHIO	4	4	7605	5.2	389	4	5	8315	400	1	8167	385
	385582	OHIO	34	45	8394	4.8	399	29	3	10145	437	1	9937	428
	388241	OHIO	2	3	8583	4.7	404	2	4	9450	451	2	8709	419
	391251	GEORGIA	2	3	5023	4.6	227	2	34	8563	344	2	8770	352
	392949	OHIO	18	34	8474	4.8	407	17	7	10354	446	2	9974	435
	394722	OHIO	6	8	8066	4.8	387	6	11	10190	416	1	10693	427
	404089	OHIO	6	15	8283	5.0	412	6	7	9785	427	2	9071	410

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY		CONTEMPORARY MILK LB.	AV. FAT LB.	YEARLY		HERO AV. FAT LB.
								NO. OAS.	RECORDS NO.			RECORDS NO.	MILK LB.	
HOL.	411580	OHIO	57	103	9429	4.4	408	46	9	10173	456	2	9678	430
		VIRGINIA	1	1	7180	4.6	332							
		KENTUCKY	1	1	8300	4.3	357	1	12	8910	430	1	9254	389
	413566	OHIO	1	1	9580	4.2	405	1	7	10190	409	1	10987	464
	426059	OHIO	1	3	8053	4.2	336	1	4	6300	323	3	8593	412
	429295	OHIO	7	8	8131	5.0	399	6	9	9958	426	1	9450	420
	445765	OHIO	8	11	8586	4.9	418	7	9	10718	464	1	10614	451
	446369	OHIO	2	3	9793	4.3	420	1	3	11370	373	1	10987	398
	451792	OHIO	1	3	9343	4.9	453							
	453207	OHIO	3	3	9573	3.8	364	3	11	10303	454	1	12840	488
	479257	OHIO	2	2	7875	4.6	362	2	10	9700	432	1	8971	411
	479963	OHIO	3	4	8412	4.7	394	3	11	10665	456			
	492910	OHIO	5	7	9039	4.9	444	5	9	9963	455	1	10146	439
	501572	OHIO	1	1	6650	5.5	368	1	2	11170	393	1	10508	423
	510923	OHIO	1	1	9040	4.4	399	1	6	7870	330	1	7194	325
	703455	OHIO	1	2	15550	3.8	583	1	10	14620	519	2	15266	535
	761292	OHIO	100	256	10904	3.7	395	54	8	12143	430	2	11662	417
		INDIANA	1	3	12913	3.4	436	1	2	11553	422	2	11881	464
		MICHIGAN	2	4	10602	3.3	351							
	763870	OHIO	76	196	12030	3.6	430	40	8	11942	424	2	11906	426
		INDIANA	2	6	14334	3.6	513	1	5	13875	515	4	13666	501
	769006	NEW YORK	2	6	11105	3.5	387							
		OHIO	77	188	10907	3.5	378	22	7	11519	407	1	11754	410
		INDIANA	1	1	14450	3.4	495							
		WEST VIRGINIA	2	5	11954	3.7	443							
	782691	PENNSYLVANIA	3	8	11612	3.6	415	1	2	13766	486	4	11325	410
		OHIO	235	616	12462	3.4	418	154	7	12153	433	2	12153	433
		INDIANA	6	20	14127	3.4	476	3	4	11942	446	1	12702	467
	783455	OHIO	7	18	11899	3.6	422	6	6	11952	441	2	11032	418
	823058	OHIO	8	21	13991	3.4	482	8	7	12364	432	2	13235	453
	837149	OHIO	109	327	11742	3.6	422	69	7	11958	424	2	11883	423
		INDIANA	3	4	13947	3.4	468	1	6	12260	495			
		WISCONSIN	1	1	11250	3.1	348							
		WEST VIRGINIA	4	13	10699	3.8	395	1	44	12460	453	1	11358	412
	847505	PENNSYLVANIA	2	2	9385	3.4	310	2	9	9005	320			
		OHIO	195	410	11529	3.6	418	185	8	12235	433	2	12065	431
		INDIANA	1	1	7800	3.8	300							
		IOWA	1	1	8510	3.8	326	1	11	10660	377			
		WEST VIRGINIA	1	2	6830	3.6	249							
	850465	OHIO	5	14	12789	3.3	428	4	7	11366	390	2	12203	424
	852725	PENNSYLVANIA	1	1	5820	3.7	215	1	5	14170	517	1	12045	420
		OHIO	166	430	12521	3.5	435	143	9	12016	426	2	11855	425
		INDIANA	1	2	11605	3.7	431							
		MINNESOTA	1	1	13150	3.2	427	1	4	14350	492			
	856661	PENNSYLVANIA	2	7	12272	3.7	459	2	9	11966	452	3	11521	434
	OHIO	933	2283	13052	3.5	450	859	8	12124	433	2	12101	431	
	INDIANA	14	39	14496	3.5	513	12	4	13172	492	3	13760	508	
	MICHIGAN	2	3	10855	3.5	366	1	11	9970	355	2	9412	331	
	IOWA	4	4	10155	3.5	348	3	9	7947	292				
	NEBRASKA	1	1	16040	3.4	539								
	WEST VIRGINIA	5	12	14076	3.5	496	4	9	10457	365	2	11310	417	
	NORTH CAROLINA	2	3	12053	3.9	466	2	9	12125	447	1	11968	467	
	SOUTH CAROLINA	1	2	8625	4.4	375	1	3	6110	300				
	KENTUCKY	8	17	10250	3.6	364	8	10	9888	354	2	10777	391	
857346	OHIO	161	300	11371	3.9	438	152	9	12561	449	2	12446	447	
	INDIANA	2	2	12975	3.8	484	1	6	13650	474	1	14039	485	
	WEST VIRGINIA	1	1	9950	3.8	375								
863710	PENNSYLVANIA	2	4	10595	3.6	377	2	6	11060	409	2	11159	418	
	OHIO	189	433	11761	3.5	409	178	8	12469	439	2	12245	436	

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS ND.	RECORDS ND.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD		
								NO.	RECORDS	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
		INDIANA	1	1	16140	3.4	557	1	6	12210	431	1	14017	510
		GEORGIA	1	4	14075	3.4	476	1	5	14448	502	2	12110	431
		KENTUCKY	1	3	13373	3.6	478	1	5	11700	418	1	10268	352
866178		DHID	252	495	12438	3.6	448	236	9	12710	453	2	12626	451
		INDIANA	2	6	11952	3.4	401	2	7	12337	435	3	11985	421
		MICHIGAN	1	2	10425	3.6	366	1	10	11050	413	1	10835	393
		WEST VIRGINIA	2	2	8030	3.6	287	1	36	9030	317	1	11031	411
		KENTUCKY	1	2	11425	3.6	415	1	11	12840	447	2	10541	362
867030		DHIO	9	11	14060	3.4	477	8	9	14325	474	1	14629	493
867035		OHID	18	26	11491	3.6	407	18	8	12947	445	1	12961	444
		GEORGIA	1	2	9230	3.1	284							
867954		OHIO	21	51	12538	3.4	421	17	7	12405	440	2	12184	433
		INDIANA	1	1	15430	3.4	529	1	4	15850	638	1	16208	618
		MICHIGAN	1	1	11310	3.3	378	1	23	10330	379			
869946		PENNSYLVANIA	2	2	8710	3.9	534	2	17	11445	398	1	12317	412
		DHIO	340	653	12726	3.6	457	323	9	12651	452	2	12628	451
		INDIANA	4	7	13950	3.8	533	4	6	14903	514	2	14793	509
		MICHIGAN	1	1	13280	3.7	488							
		WISCONSIN	1	1	8670	3.6	312							
		IOWA	1	2	9010	4.0	353	1	11	10960	387			
		WEST VIRGINIA	6	9	10696	3.8	404	3	14	9463	362	2	9857	362
889549		DHIO	79	161	12006	3.5	416	78	8	12465	441	2	12262	430
		INDIANA	1	1	12240	3.6	444							
893840		OHID	58	134	11626	3.5	403	56	7	12146	435	2	12137	425
		INDIANA	1	1	10980	4.4	481	1	4	15610	624	1	16208	618
895911		NEW YORK	4	4	12308	3.7	457	3	41	12473	458	1	11925	442
		PENNSYLVANIA	3	3	11440	3.7	430	3	7	9563	365	1	9468	349
		OHIO	159	256	12249	3.6	442	146	10	12566	455	1	12596	454
		INDIANA	3	6	13605	3.5	475	3	4	13114	481	3	12005	428
		ILLINOIS	1	1	16230	3.7	375	1	5	11680	437			
		MICHIGAN	2	5	12769	3.8	476	2	6	12009	394	3	13414	451
		WISCONSIN	5	9	11786	3.8	432	5	35	14587	551	1	13082	487
		WEST VIRGINIA	1	1	10830	3.6	393							
		GEORGIA	4	6	13423	3.5	455	4	96	9339	387	1	10427	422
		ALABAMA	1	1	9910	3.3	323	1	153	9520	364	1	10224	385
905343		OHID	4	4	11863	3.6	423	3	10	15190	507	1	14734	500
906229		OHIO	17	43	11871	3.4	402	9	7	12101	435	2	11778	430
907873		PENNSYLVANIA	1	1	8280	3.3	275	1	17	10120	357			
		OHIO	119	267	11683	3.4	399	114	8	12248	432	2	11995	426
		INDIANA	4	11	12185	3.5	419	4	4	13246	463	3	12500	438
		WEST VIRGINIA	1	2	14615	3.5	491							
		NORTH CAROLINA	2	4	12347	3.6	444	2	4	9804	432	2	9979	407
935695		DHIO	107	231	12051	3.7	441	104	8	12567	445	2	12209	432
950704		VERMONT	1	1	16070	3.6	572							
		OHIO	301	508	12669	3.6	451	280	10	12579	454	2	12574	453
		WEST VIRGINIA	2	2	11370	3.8	429	2	31	10325	367			
		TEXAS	1	1	11260	4.0	450					1	11085	395
975892		RHODE ISLAND	1	1	17300	3.6	631	1	17	13550	510	1	14203	536
		NEW YORK	1	2	11145	3.7	410	1	31	14040	517	1	12960	483
		PENNSYLVANIA	2	2	9910	3.5	347	2	14	10510	374	1	9789	353
		OHIO	201	298	12751	3.7	472	188	11	12720	460	1	12516	454
		INDIANA	1	1	13720	3.5	474							
		MICHIGAN	5	5	14610	3.9	568	5	17	14662	556	1	15046	565
		IOWA	2	3	10425	3.5	366	2	10	11080	395	1	13538	498
		FLORIDA	1	1	11110	3.7	407	1	18	9360	342			
		KENTUCKY	2	2	15575	3.3	503	2	15	10330	368	1	11402	413
		TEXAS	4	4	14440	3.8	535	3	10	14210	537	1	10181	364
		ARIZONA	1	1	16520	3.8	620	1	24	15770	548	1	15075	529
976710		RHODE ISLAND	7	10	11323	3.8	424	7	12	13044	503	1	13061	503
		CONNECTICUT	1	1	10960	4.1	448	1	15	14580	528	1	14606	529
		NEW YORK	1	1	20530	3.4	706	1	6	16330	580	1	15391	556
		PENNSYLVANIA	1	2	16485	3.4	548	1	21	14130	494	1	14519	517
		DHIO	539	680	12228	3.7	445	493	11	12647	460	1	12819	466
		INDIANA	10	11	14427	3.5	509	10	5	14019	532	1	14707	553
		ILLINOIS	2	3	9865	3.9	379	2	23	13625	505	1	14317	533
		MICHIGAN	5	5	13902	3.7	514	5	17	15276	587	1	15097	578
		WISCONSIN	3	3	15393	3.1	481	3	5	14730	519	1	15151	558
		IDWA	1	1	13840	3.9	535	1	17	12940	478			
		WEST VIRGINIA	2	2	11595	3.6	417	2	12	7700	308	1	7625	296
		KENTUCKY	5	7	11232	3.7	415	4	15	12343	445	1	12099	444

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GRUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECDRDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY DAUS. NO.	CONTEMPDRARY RECDRDS NO.	MILK LB.	FAT LB.	AV. RECORDS NO.	HERD MILK LB.	AV. FAT LB.
		OKLAHOMA	2	2	12695	3.7	469	2	9	11690	413			
		TEXAS	10	15	15467	3.8	586	10	9	15174	572	1	14130	537
		COLORADO	11	11	13686	3.7	496	11	7	13675	488	1	12723	448
	987085	OHIO	7	13	14460	3.4	481	7	10	14241	477	2	14714	501
	992370	NEW JERSEY	1	1	13300	4.1	544	1	4	7880	385	1	9875	443
		OHIO	106	162	11415	3.7	418	98	10	12618	454	1	12420	447
		INDIANA	1	1	12150	4.0	483	1	7	15830	528			
		MICHIGAN	1	1	14690	3.6	525	1	24	11510	417	1	13527	493
		MARYLAND	1	1	10540	4.3	456	1	28	10860	408	1	11674	449
	992857	OHIO	119	157	12260	3.7	449	105	11	12678	458	1	12607	454
		WEST VIRGINIA	2	2	11695	4.0	468	2	23	12280	486	1	13015	500
		KENTUCKY	2	5	12044	3.8	458	2	10	10720	376	2	11181	399
	1001748	NEW HAMPSHIRE	1	2	10685	4.3	456	1	27	11535	449	1	11074	417
		RHODE ISLAND	2	2	13795	3.5	478	2	1	16340	554			
		OHIO	316	400	12208	3.8	462	284	10	12793	467	1	12891	476
		INDIANA	3	4	13070	3.9	497	2	8	14055	517	1	16873	638
		MICHIGAN	1	1	5190	3.9	200							
		WEST VIRGINIA	1	2	13595	3.5	477	1	43	12245	441	1	11554	414
		KENTUCKY	1	1	8770	3.9	346	1	19	10000	344	1	10649	386
		TEXAS	2	2	9400	3.8	356	2	18	12160	428	1	9854	366
	1006866	MASSACHUSETTS	1	1	13470	3.5	478	1	22	10440	392	1	9123	370
		RHODE ISLAND	1	1	16080	3.4	545	1	2	13800	478			
		NEW YDRK	17	13	12220	3.8	465	17	36	13604	510	1	13197	493
		PENNSYLVANIA	1	1	15520	3.7	572	1	15	12760	461	1	11456	407
		OHIO	318	444	12628	3.7	459	298	11	12630	458	1	12579	456
		INDIANA	6	6	15185	3.5	532	4	5	11890	432	1	14595	501
		WISCONSIN	1	1	12260	3.4	420	1	12	12220	470	1	8578	392
		VIRGINIA	1	1	15360	4.2	645	1	3	12580	525	1	12960	512
		WEST VIRGINIA	6	7	13189	3.7	483	6	22	11213	426	1	11046	417
		SOUTH CAROLINA	1	1	9760	3.6	348	1	6	11200	394			
		KENTUCKY	2	3	10515	3.7	376	2	10	11718	425	1	11816	425
		ALABAMA	2	2	8510	3.4	286	1	19	8440	271			
		TEXAS	1	1	14480	3.7	541	1	21	14260	531	1	10181	364
		MONTANA	2	2	12520	3.8	479	2	11	12980	531			
	1011334	OHIO	123	200	12863	3.6	462	118	11	12219	440	1	12277	444
		WEST VIRGINIA	1	3	12420	3.4	427	1	4	10790	419	3	11343	425
	1015251	PENNSYLVANIA	1	2	9765	3.5	344	1	6	9725	368	2	8584	321
		OHIO	79	158	11818	3.5	413	72	10	12441	446	2	12256	442
		INDIANA	2	3	12988	3.7	475	2	6	13580	510	1	13565	481
		WEST VIRGINIA	2	4	12707	3.8	483	2	19	11609	445	3	10987	406
	1015348	OHIO	102	116	13627	3.5	478	97	15	12943	458	1	13258	469
		INDIANA	2	2	11710	3.4	396	2	8	12130	446	1	12764	464
		MICHIGAN	1	1	16180	3.6	622	1	19	12560	468	1	11739	422
	1017532	OHIO	54	63	12784	3.8	476	50	11	12673	465	1	13196	482
		WEST VIRGINIA	1	1	11660	3.6	416	1	12	13100	506	1	13015	500
	1017797	MASSACHUSETTS	7	15	14883	4.0	592	7	125	14774	562	2	14039	537
		NEW YDRK	2	2	19660	3.7	717	1	26	12930	476	1	13560	486
		NEW JERSEY	50	72	12704	3.7	468	39	56	12964	478	1	12329	455
		PENNSYLVANIA	1	1	11430	3.4	393	1	13	9440	341	1	11827	422
		OHIO	96	121	12533	3.6	449	83	9	12557	458	1	12742	468
		INDIANA	1	1	12990	3.3	426							
		WISCONSIN	1	1	15020	3.6	537	1	7	14970	500	1	15151	558
		VIRGINIA	2	2	15575	4.3	659	2	22	15230	570	1	15445	605
		TEXAS	4	4	14783	3.7	535	3	14	13633	506	1	11260	403
		ARIZONA	1	2	16615	3.2	507	1	10	16550	579	1	15075	529
	1026115	MAINE	2	2	17465	3.4	596	2	19	12420	452	1	12404	468
		NEW HAMPSHIRE	1	1	13380	3.8	510	1	37	12720	494	1	12764	497
		VERMONT	5	5	14612	3.7	542	5	8	12728	459	1	13215	494
		MASSACHUSETTS	9	10	13044	4.0	524	9	20	13628	524	1	14175	552
		RHODE ISLAND	1	1	8710	4.0	345	1	21	13030	496	1	14203	536
		CONNECTICUT	9	10	14993	3.8	569	7	18	13035	476	1	12506	464
		NEW YORK	14	19	13575	3.8	517	13	22	13000	473	1	13104	481
		NEW JERSEY	9	10	12864	3.9	497	8	36	13724	524	1	12730	490
		PENNSYLVANIA	2	2	11865	3.6	440	2	23	10555	389	1	12252	450
		OHIO	181	240	12738	3.7	466	172	11	12548	454	1	12792	465
		MICHIGAN	2	2	10090	4.2	426	2	22	13155	508	1	13740	523
		IOWA	4	4	13180	4.0	527	2	2	12160	503			
		MARYLAND	3	4	12475	4.6	583	3	12	13670	530	1	14617	564
		VIRGINIA	1	1	13740	3.7	507	1	15	13350	489	1	13189	484
		NORTH CAROLINA	1	1	15140	3.8	579	1	15	14990	514	1	13963	505
		SOUTH CAROLINA	1	1	12630	3.4	435	1	32	10640	377	1	10497	375
		GEORGIA	3	4	16012	3.9	609	3	48	15485	574	1	14755	535
		KENTUCKY	6	8	12186	3.7	445	6	13	11775	421	1	11291	409

TABLE 16.--DAUGHTER--AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				AV. YEARLY HERD		AV. FAT LB.
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	
	1035164	OHIO	52	61	14897	3.5	522	50	13	13001	473	1	13367	486
		INDIANA	1	1	14850	3.3	489							
		WEST VIRGINIA	1	1	13330	3.3	440	1	11	11050	408	1	11314	397
	1035889	VERMONT	1	1	13460	3.4	462	1	1	14820	611			
		PENNSYLVANIA	2	3	12610	3.4	428	2	7	11193	592	1	10649	388
		OHIO	146	197	12624	3.6	450	137	10	12536	454	1	12414	451
		MICHIGAN	1	1	4980	4.0	200	1	8	9600	361			
		WISCONSIN	1	2	11680	3.5	405	1	7	14980	543	1	8578	392
		WEST VIRGINIA	2	2	12680	3.6	457	2	28	12000	428	1	11314	397
		FLORIDA	1	1	9570	3.4	322	1	40	9040	317	1	8971	318
		TEXAS	1	1	15230	3.4	524	1	38	13540	466			
	1042139	NEW YORK	8	10	12556	3.8	475	8	50	14563	542	1	14298	532
		OHIO	69	76	13188	3.6	471	65	12	12618	464	1	12864	472
	1050848	OHIO	17	17	12862	3.7	468	17	10	12072	445	1	12766	458
		INDIANA	1	1	14200	3.6	513	1	4	14890	565			
	1090258	MAINE	1	1	8460	3.5	297							
		VERMONT	1	1	8930	3.8	336	1	4	9740	343	1	10867	401
		RHODE ISLAND	2	2	14375	4.0	569	2	5	13510	522	1	11728	441
		CONNECTICUT	1	1	13540	3.4	465	1	3	14140	584			
		NEW YORK	7	7	13640	3.9	533	6	34	14673	572	1	15563	610
		OHIO	191	195	12784	3.7	474	183	13	12982	466	1	13057	470
		INDIANA	3	3	14253	3.8	552	2	5	15270	566	1	8142	304
		VIRGINIA	1	1	13250	4.0	528	1	48	12120	443			
		WEST VIRGINIA	3	3	12180	4.0	478	3	26	11713	449	1	11244	435
	1094305	MAINE	5	5	13262	3.8	504	5	18	14908	554	1	15215	574
		NEW HAMPSHIRE	1	1	11580	4.3	499	1	12	10480	415	1	10311	409
		RHODE ISLAND	1	1	15610	3.9	606	1	12	15910	607	1	15042	572
		OHIO	56	58	12938	3.7	483	49	13	12999	473	1	13385	489
		IOWA	1	1	10030	3.7	369	1	17	13160	488			
		GEORGIA	1	1	17660	3.3	587	1	35	9780	451	1	10944	470
	1095002	IOAHO	8	9	12952	3.6	489	8	19	14729	542	1	14466	525
		COLORA00	2	2	16765	3.6	602	2	3	15570	518			
		WASHINGTON	1	2	14015	4.3	593	1	20	14930	614	2	14051	572
		OREGON	3	4	14777	3.7	542	2	13	14950	559	1	14639	544
		CALIFCRNIA	1	1	17050	3.0	504	1	25	18240	616			
	1105615	OHIO	1	1	9650	3.1	298							
		MARYLAND	1	1	14830	3.7	549	1	139	12120	490	1	11510	463
	1112211	CONNECTICUT	1	1	18240	4.4	805	1	10	13630	496	1	15489	604
		NEW YORK	33	33	16151	3.6	589	32	23	14084	526	1	14165	528
		PENNSYLVANIA	4	4	13993	3.7	506	4	19	12818	470	1	12807	473
		OHIO	2	2	12640	3.7	480	1	4	17840	750	1	12382	496
		VIRGINIA	2	2	10215	4.1	421	2	57	14655	600	1	11205	433
		TEXAS	1	1	16670	3.6	606	1	18	13630	561			
	1137421	NORTH CAROLINA	24	43	13757	3.8	516	21	45	13720	514	2	13817	509
	1139159	OHIO	55	73	12394	3.6	443	55	9	12435	445	1	13004	465
		WEST VIRGINIA	2	3	10833	3.6	389	2	30	12110	432	1	11434	406
		KENTUCKY	1	1	12570	3.0	377	1	14	12670	443	1	11816	425
	1142734	OHIO	3	3	14060	3.0	506	1	1	12090	412			
	1148087	RHODE ISLAND	24	29	14598	3.7	542	24	13	13380	496	1	13874	519
	1174788	NORTH CAROLINA	13	14	13684	3.7	506	12	49	14794	577	1	14736	554
	1224837	NEW JERSEY	2	2	12665	3.6	450	2	12	11670	439	1	12944	480
JER.	371588	OHIO	23	65	7114	5.5	386	10	7	7897	394	2	7987	410
		INDIANA	1	1	7280	4.9	356							
		MICHIGAN	1	4	8863	5.0	435							
	392324	OHIO	2	4	5570	5.4	299							
	397611	VERMONT	1	3	5953	5.5	325							
		CONNECTICUT	1	1	8910	5.5	486							
		OHIO	6	18	7639	5.2	391	1	4	6917	361	3	8077	397
	398840	PENNSYLVANIA	1	6	8920	4.4	391							
		OHIO	44	142	8293	4.7	386	14	4	7868	420	2	8112	421
		MICHIGAN	2	8	8572	4.8	408					4	7769	414
		IOWA	1	3	6093	4.6	283							
	406995	VERMONT	1	1	11360	4.7	533							
		OHIO	9	19	7503	5.1	382	3	4	7473	379	1	7925	397
		FLORIDA	1	1	6310	5.7	357							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	YEARLY RECORDS NO.	MILK LB.	AV. FAT LB.
	408731	OHIO FLORIDA	56 1	136 2	7648 9550	5.3 5.8	401 554	20	10	8158	419	2	8167	417
	414443	OHIO	25	61	7281	4.8	349	10	6	7821	400	2	7762	394
	419248	OHIO INDIANA IOWA TEXAS IDAHO NEW MEXICO OREGON	40 2 3 26 1 4 2	62 2 6 45 2 5 8	8635 11245 6776 9344 9780 7556 11922	5.2 4.9 5.5 5.4 5.2 4.9 5.7	452 544 376 501 505 376 685	33 2 3 15 1 1 1	14 17 22 56 2 4 22	8310 10675 8523 8618 8265 6660 10367	426 535 463 448 458 332 569	1 1 1 2 1 1 4	8366 9657 8134 8319 7347 10216	437 494 446 410 352 560
	424323	OHIO	9	21	7309	5.7	411	3	6	8004	413	2	7598	375
	431819	NEW YORK PENNSYLVANIA OHIO	1 1 10	2 1 19	4340 5090 8079	5.2 5.6 5.2	223 287 417	1	5	8300	419			
	432588	OHIO	22	76	7857	5.2	404	7	3	8075	400	2	7882	389
	432629	VERMONT NEW JERSEY PENNSYLVANIA OHIO MARYLAND TENNESSEE	1 10 1 11 1 1	1 14 5 22 8 4	6380 6608 8806 7648 6858 6683	4.6 4.8 5.1 5.0 4.8 5.2	294 315 454 379 335 348	9	11	7645	385	2	8512	434
	434170	PENNSYLVANIA OHIO MICHIGAN NORTH CAROLINA	1 30 1 1	1 96 1 1	6400 7991 7810 9130	5.7 5.4 5.8 5.3	365 430 454 481	17	12	7937	409	3	8079	415
	436532	OHIO FLORIDA	29 7	69 12	8397 7256	4.8 4.8	399 347	15	8	8537	429	2	8042	413
	441793	OHIO FLORIDA	47 3	99 4	7581 7948	5.0 5.2	380 408	20	6	7832	405	2	7791	402
	443388	OHIO	15	22	8644	5.2	448	13	11	9011	466	1	8585	445
	446103	OHIO FLORIDA	63 2	146 5	7341 6243	5.4 5.4	393 337	29 1	15 37	7681 8080	394 417	2 3	8290 7790	429 401
	453500	PENNSYLVANIA OHIO INDIANA NORTH CAROLINA	1 46 1 1	2 120 3 1	7170 7545 7633 6630	4.6 5.2 5.6 5.2	332 391 426 345	16	5	7919	386	2 3 1	7445 8833 7052	365 416 307
	457095	NEW YORK OHIO FLORIDA	1 34 1	3 68 1	8480 7091 7210	5.5 5.6 5.6	463 397 401	22	7	7728	404	2	8140	419
	460560	NEW YORK OHIO MINNESOTA WEST VIRGINIA SOUTH CAROLINA TENNESSEE NEW MEXICO	1 132 1 1 1 1 1	5 287 1 1 1 2 1	9696 8104 9100 9760 7500 7855 7010	4.5 4.9 6.0 5.3 4.5 4.6 5.7	434 397 542 519 335 361 400	97	11	8113	416	2	8060	415
	462295	OHIO	4	12	7127	5.0	358	4	13	8050	388	3	7870	380
	467830	NEW JERSEY OHIO	1 39	1 76	9410 7072	5.4 5.1	513 362	23	13	7608	393	2	7747	398
	468937	PENNSYLVANIA OHIO INDIANA IOWA WEST VIRGINIA FLORIDA TENNESSEE TEXAS NEW MEXICO ARIZONA	5 113 5 3 3 2 1 7 1 4	10 171 9 5 5 2 1 13 1 10	6711 8276 10113 8657 7477 6080 8080 7824 10520 9821	5.7 5.3 5.4 5.7 5.3 5.6 5.7 5.0 5.2 5.2	374 438 537 491 399 344 461 392 546 511	4 81 5 3 3 2 1 6 1 4	14 13 12 29 40 17 27 31 10 13	6108 8330 10241 8050 9147 8215 6890 7504 6870 8501	324 424 509 440 445 426 343 373 311 435	2 1 1 1 1 1 1 1 1 2	6409 8315 9370 8357 9124 7586 7323 7347 8948	352 423 476 458 436 382 377 352 449
	473215	PENNSYLVANIA OHIO INDIANA IOWA WEST VIRGINIA NORTH CAROLINA TEXAS NEW MEXICO	1 67 2 3 2 1 4 1	2 96 3 7 2 1 4 1	10350 9039 11693 11905 7525 7820 10028 13170	4.8 4.9 5.3 4.6 4.8 5.0 5.1 4.5	495 439 616 545 364 394 512 593	1 61 2 3 1 1 4 1	38 16 13 16 38 79 99 8	10080 8009 10830 9043 10980 6590 8633 10470	509 410 542 467 518 318 449 555	1 1 1 1 1 1 1 1	9298 8533 10797 8775 6355 7717	480 439 532 409 323 396

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAS.	CONTEMPORARY NO. RECORDS	AV. MILK LB.	FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
		WASHINGTON	1	1	10370	5.0	513		1	108	8470	421	1	8012 410
	476495	OHIO	12	15	8383	5.1	428	11	16	8298	425	1	8203	418
		NORTH CAROLINA	1	1	10050	4.0	407	1	42	7420	353	1	7750	375
	483844	OHIO	6	10	7910	4.9	390	4	18	8306	406	1	8461	426
		KENTUCKY	1	1	3950	5.4	212	1	45	6460	335	1	6246	319
	484031	OHIO	36	61	8342	4.9	409	23	11	8923	444	1	8363	419
		WEST VIRGINIA	1	1	8550	4.0	339							
		NORTH CAROLINA	1	1	7960	5.0	397	1	42	7470	353	1	7565	363
		FLORIDA	4	6	9666	5.3	513	4	7	8855	459			
		OKLAHOMA	1	1	10420	4.8	500	1	7	8130	404			
	488392	PENNSYLVANIA	1	3	6310	4.6	293	1	10	6223	324	3	6587	359
		OHIO	69	119	7709	5.1	389	51	13	8072	410	1	8178	416
		INDIANA	1	1	7000	5.4	380	1	6	5550	295	1	5592	283
		MICHIGAN	3	4	7157	5.4	378	2	18	6500	345	1	5036	271
		FLORIDA	2	2	5805	5.9	325	1	58	8380	465	1	7695	412
		TEXAS	6	6	8813	4.9	431	5	75	8404	425	1	8328	354
		ARIZONA	1	1	6190	6.2	386	1	30	8950	471	1	7990	432
	491174	CONNECTICUT	2	2	7010	5.0	350							
		OHIO	30	30	7704	5.1	388	27	11	8000	410	1	8386	426
		IOWA	1	1	7480	5.0	371	1	3	8000	432			
		TEXAS	2	2	6520	5.1	331	2	57	7235	361			
		ARIZONA	1	1	8400	5.3	449	1	3	9030	460			
	499207	PENNSYLVANIA	8	12	6734	5.1	343	2	24	6685	343	2	6524	352
		OHIO	122	170	7917	5.2	411	103	13	7981	405	1	8026	406
		MICHIGAN	6	15	9738	6.1	595	6	24	9167	516	1	10039	573
		WISCONSIN	2	3	10730	5.2	553	2	7	9005	479	2	9451	515
		MINNESOTA	2	2	10635	5.7	606	2	85	9630	523			
		IOWA	7	12	8629	5.2	443	5	21	8586	445	1	6979	423
		VIRGINIA	1	3	4883	5.8	283	1	22	6865	388	2	7456	423
		WEST VIRGINIA	1	1	7130	4.8	339	1	38	10970	518	1	8775	409
		NORTH CAROLINA	3	3	7013	4.9	340	3	77	6590	318	1	6958	339
		FLORIDA	1	1	10400	4.2	436							
		TENNESSEE	2	3	9820	5.0	479	2	59	8628	430			
		TEXAS	12	13	8472	5.0	423	12	59	7796	396	1	6785	332
		COLORADO	1	2	9210	5.3	485	1	1	9360	446	1	10649	532
	501213	OHIO	1	3	9120	5.5	505							
		WEST VIRGINIA	1	1	8920	5.4	485							
		FLORIDA	2	2	8325	4.3	365							
	508078	PENNSYLVANIA	3	3	7170	5.3	364	1	5	6360	330	1	7107	379
		OHIO	28	33	8258	5.4	440	26	12	8158	426	1	8590	439
		IOWA	1	1	11680	5.0	587					1	7717	423
		WEST VIRGINIA	1	1	9810	4.7	460	1	21	12570	611	1	8796	417
		SOUTH CAROLINA	7	7	8249	5.3	437	7	33	9677	499	1	8159	429
		FLORIDA	1	1	4560	5.6	256							
		TEXAS	1	1	7000	5.5	384	1	109	8560	430			
	520051	PENNSYLVANIA	1	1	5270	4.9	259							
		OHIO	76	98	7506	5.2	385	68	12	7905	401	1	8052	410
		ILLINOIS	1	1	8380	5.9	491	1	8	7310	396			
		MICHIGAN	1	1	10950	5.4	589	1	22	9230	549	1	10202	582
		IOWA	6	7	7921	5.5	431	5	4	8960	491	1	8859	493
		WEST VIRGINIA	1	2	8505	5.3	452	1	13	8850	448			
		NORTH CAROLINA	3	3	7487	5.1	389	3	41	8047	387	1	7754	393
		FLORIDA	2	2	4090	5.3	215	2	30	7120	366			
		TENNESSEE	1	1	6230	5.9	371	1	10	7990	401			
		TEXAS	4	4	6075	5.1	311	4	27	6770	335	1	7074	346
		NEW MEXICO	1	1	8040	5.0	403	1	10	7120	325	1	7347	352
		ARIZONA	2	2	9965	5.3	530	2	2	7480	353	1	9690	501
	521647	OHIO	3	5	9241	5.0	460	3	18	8092	437	1	8502	456
	534455	OHIO	12	21	7896	4.8	378	10	14	7922	405	2	7479	388
		INDIANA	1	3	7873	5.4	422	1	5	7600	441	1	8796	439
	542372	OHIO	1	1	6270	5.6	352	1	3	7310	372			
		IOWA	1	1	7150	5.6	399	1	28	8420	473	1	8982	481
	549126	WASHINGTON	1	1	11130	5.3	584							
B.S.	40081	OHIO	4	7	10895	3.9	421	1	19	10100	416	1	10301	424
	43108	OHIO	19	51	9422	3.8	353	4	8	11070	428	2	10978	441
		INDIANA	1	6	10012	3.7	364	1	6	11068	449	5	9827	395
		ILLINOIS	1	1	5070	3.9	196							
		MICHIGAN	10	35	10742	3.9	419	2	5	13435	507	2	11336	448

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY RECORDS NO.	AV. MILK LB.	AV. FAT LB.	YEARLY HERD NO.	YEARLY MILK LB.	AV. FAT LB.
		KENTUCKY	2	6	10474	3.8	395	2	3	10565	428	2	9785	404
		TENNESSEE	1	2	9690	3.6	347							
45892	OHIO		4	9	11328	4.1	458	1	10	11545	482	1	12840	538
	INDIANA		2	9	11293	3.9	443							
47974	INDIANA		1	4	11600	4.2	492	1	4	11370	458	1	10715	448
48672	CONNECTICUT		1	7	10230	4.1	426							
	NEW YORK		1	1	12100	3.8	463							
	NEW JERSEY		3	4	14185	4.7	669							
	PENNSYLVANIA		1	2	8560	4.4	372	1	5	9665	390	1	9134	377
	OHIO		13	43	11247	4.3	476	4	9	11970	493	3	11819	485
	WISCONSIN		1	4	10115	4.4	443	1	11	10155	411	2	8524	347
	KENTUCKY		1	5	6896	4.1	281	1	11	9744	382	4	8908	348
48949	OHIO		20	49	9754	4.3	414	7	10	11139	464	2	8701	413
	INDIANA		2	3	10985	4.1	460							
	KENTUCKY		2	3	4990	4.6	231	2	5	8935	385	1	8344	327
48950	OHIO		6	12	10110	4.1	418	3	3	13180	501	1	11805	465
49266	OHIO		36	92	10374	4.2	430	18	6	11215	445	2	10597	425
	INDIANA		2	4	8230	4.4	355	1	5	13310	555	1	11271	465
	KENTUCKY		3	5	10204	3.9	398	2	3	11515	456	1	10072	413
49411	OHIO		20	44	10467	4.0	419	10	5	10261	415	2	10317	418
	KENTUCKY		1	5	8532	3.9	331	1	3	7723	300	2	7723	313
51675	OHIO		17	36	9890	4.1	405	9	6	10325	419	2	10317	413
	MICHIGAN		2	2	10175	4.2	419							
53716	OHIO		33	54	9913	4.1	410	14	6	10111	412	1	10141	411
	WASHINGTON		1	1	11980	3.8	450	1	6	13100	492			
57699	OHIO		65	144	10838	4.1	445	37	6	10985	448	2	10718	441
	KENTUCKY		2	2	9575	4.4	419	1	5	9590	379			
60137	OHIO		3	10	11046	3.9	432							
	WEST VIRGINIA		1	1	10630	4.1	440							
60560	OHIO		11	27	9217	4.2	381	3	8	12178	501	2	11334	458
	KENTUCKY		3	7	9018	4.3	384	3	4	7619	311	1	7336	292
69978	CONNECTICUT		1	2	10650	4.5	481	1	7	14060	579	1	12742	520
	NEW YORK		2	3	7223	4.4	316							
	NEW JERSEY		1	3	11893	4.2	500							
	PENNSYLVANIA		6	12	9276	4.6	421	4	10	10232	434	2	10222	438
	OHIO		126	211	10401	4.1	426	77	8	10627	436	2	10631	437
	ILLINOIS		1	1	12500	4.1	514	1	8	11170	470	1	12055	495
	MICHIGAN		1	2	2160	4.5	97	1	14	9190	356			
	WISCONSIN		2	2	10560	4.0	420	1	18	9190	366	1	9494	383
	MARYLAND		1	2	7810	4.6	357							
76059	MAINE		1	1	9800	5.5	543							
	VERMONT		3	4	13148	4.5	568							
	MASSACHUSETTS		6	11	12046	4.5	542	2	32	10752	456	1	9681	426
	NEW YORK		12	19	9899	4.5	413	4	19	11308	449	1	10756	441
	PENNSYLVANIA		5	11	8438	4.5	371	4	9	10254	435	2	10051	428
	OHIO		176	284	11000	4.4	481	97	10	11669	489	1	11141	466
	INDIANA		4	4	12103	4.4	533	1	6	13010	535	1	11271	465
	ILLINOIS		3	10	10639	4.3	455	3	9	11543	459	2	11340	477
	MICHIGAN		2	6	10329	4.7	488	2	10	12600	509	2	10666	444
	WISCONSIN		3	5	9548	4.1	395	3	9	10863	433	2	10132	411
	IOWA		2	3	8505	4.2	357	2	16	9490	376			
	SOUTH DAKOTA		1	1	10640	4.4	470							
	MARYLAND		9	10	10067	4.4	439	2	8	10850	476	1	10559	421
	VIRGINIA		1	2	10590	4.2	448	1	3	10795	483	2	10644	432
	WEST VIRGINIA		2	2	7625	4.3	523							
	GEORGIA		1	1	7860	3.8	303							
	KENTUCKY		3	4	8705	4.5	568	2	5	8748	353	1	8099	331
	ARKANSAS		1	1	9140	4.4	403							
	TEXAS		1	1	5990	4.0	242							
	COLORADO		8	8	12654	4.4	548	3	5	11953	493	1	13026	509
	CALIFORNIA		1	1	2490	4.6	114							
77319	NEW YORK		2	2	13815	4.2	572	2	21	10725	435	1	11140	456
	PENNSYLVANIA		1	1	11050	4.6	511	1	7	10330	449	1	11194	459
	OHIO		80	111	11038	4.1	455	50	11	10448	428	1	10389	426
	ILLINOIS		1	2	13840	4.0	546	1	2	13675	558			
	IOWA		2	2	6895	4.2	285					1	11723	483
	MARYLAND		3	3	9283	4.4	410					1	10507	429
	WASHINGTON		3	5	12319	4.0	493	3	11	12628	514	2	12479	499

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV. YEARLY HERD			
								NO. OAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
002	78152	NEW YORK	4	7	12954	4.0	514	4	17	11878	490	2	11663	480
		PENNSYLVANIA	3	4	10437	4.2	442	2	21	9580	412	1	9598	402
		OHIO	138	224	10904	4.1	445	83	8	10980	450	1	10537	432
		INDIANA	2	5	11742	4.5	518	2	4	13018	545	3	12001	502
		ILLINOIS	1	1	9690	4.1	400	1	4	12350	539			
		MICHIGAN	1	1	11420	4.2	479	1	3	6940	312	1	11009	421
		WISCONSIN	1	3	10360	4.2	438							
		IOWA	1	2	10220	4.2	424	1	8	9705	397	1	8884	359
		NEBRASKA	1	1	12010	4.1	490							
		COLORADO	1	1	12940	4.5	580							
	79584	NEW YORK	2	4	10409	4.3	448	2	22	11305	458	2	10869	447
		OHIO	34	64	9979	4.1	412	25	8	10808	442	2	10580	431
		WEST VIRGINIA	1	2	5960	4.3	252							
	84052	NEW YORK	1	1	17440	4.1	715	1	21	12280	529	1	11968	509
		OHIO	28	37	11303	4.0	456	19	9	10513	439	1	9411	395
		INDIANA	1	1	13220	4.2	549							
		WISCONSIN	1	2	8820	4.1	362							
	88940	NEW YORK	1	1	15390	3.8	584	1	22	15270	640	1	13603	567
		OHIO	71	108	10653	4.1	435	45	9	10699	445	1	10484	436
		INDIANA	2	3	12595	4.2	528	1	9	11850	469	1	11881	483
		IOWA	1	1	12720	3.8	485	1	8	13420	517	1	12001	480
		MARYLAND	1	1	9260	3.8	354					1	11510	463
		TEXAS	1	1	16020	3.8	615	1	23	11950	466	1	7913	311
	96441	NEW YORK	1	1	9180	4.1	380	1	28	11520	466	1	10693	434
		OHIO	102	140	10278	4.3	441	70	11	11108	457	1	10737	444
		ILLINOIS	1	2	10700	4.8	509	1	25	10960	456	1	10606	425
		IOWA	1	1	7240	4.9	354	1	6	8120	349	1	8796	378
		MARYLAND	1	3	9567	4.6	440					2	10720	435
		WASHINGTON	7	11	10775	4.2	457	7	10	12093	489	2	11945	480
	99252	OHIO	4	4	6228	4.0	251	1	1	4690	189			
	105449	OHIO	37	43	12481	4.3	539	31	16	11758	496	1	11960	492
		MARYLAND	1	1	11670	4.3	505					1	8502	361
	106794	NEW YORK	2	4	7293	4.6	322	1	6	9770	396			
		OHIO	82	126	10617	4.2	449	41	8	10964	458	1	10635	448
		MICHIGAN	1	2	9765	4.2	413	1	5	10245	434	2	10579	443
		WISCONSIN	1	1	9750	4.5	436	1	19	9420	370	1	9494	383
	107384	OHIO	6	6	10590	4.3	457	3	18	11253	464	1	12840	538
AYR.	55761	OHIO	35	97	9273	3.8	349	7	8	10117	383	2	9625	355
		GEORGIA	1	1	6730	3.3	224							
		KENTUCKY	1	1	8120	3.7	304							
		OKLAHOMA	2	4	8443	3.8	319							
		TEXAS	1	3	11167	3.6	406							
		IDAHO	1	1	5760	3.5	200	1	2	8630	331	1	7358	290
		CALIFORNIA	1	1	8270	3.7	310							
	62183	OHIO	1	1	8050	3.4	271							
	62648	OHIO	5	5	10240	3.7	383	3	5	9383	379			
		MICHIGAN	2	8	11309	4.0	446	1	2	11573	438	1	7467	315
	65363	OHIO	11	26	8394	4.0	335	8	5	9298	355	2	9253	357
	68214	OHIO	13	27	11557	4.1	468	4	3	9635	387	2	8799	338
		INDIANA	2	3	10430	4.2	436	1	10	7560	308	1	7586	308
	69211	OHIO	6	21	10075	3.9	393	5	7	10469	406	2	9498	380
	72194	OHIO	4	8	9240	4.0	373	2	6	9379	358	1	7510	296
		INDIANA	1	1	7830	4.6	358							
	74656	OHIO	10	16	9067	3.9	354	8	5	9029	345	2	9194	348
		MICHIGAN	2	5	11058	3.9	429	1	2	11700	458	1	7467	315
	81791	OHIO	6	12	8703	4.2	363	1	11	10880	441	3	10239	404
		MICHIGAN	2	4	10177	4.0	389							
GUER	225757	OHIO	2	7	10079	4.6	461							
	240290	OHIO	1	1	5870	3.9	227							
	243477	OHIO	1	2	5920	5.1	305							
	250198	OHIO	18	46	7830	4.9	382	4	4	8640	407	2	8335	391
		MICHIGAN	1	1	6080	4.6	278							
MARYLAND		1	1	5590	5.5	308								
	TENNESSEE	1	2	5515	5.2	287								

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY RECORDS NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
	253695	OHIO	1	2	5500	4.8	264							
	256034	OHIO	6	14	9328	5.0	461	3	11	10829	467	2	10699	475
	258553	OHIO	6	16	5658	4.8	266	1	2	8697	420	1	7554	368
	277165	OHIO	6	14	8465	4.9	412	1	4	12770	518			
	277498	OHIO	2	2	9375	4.7	441							
	283665	OHIO VIRGINIA	10 1	26 1	8310 4610	4.8 4.4	393 213	5	6	9120	392	4	8841	418
	283950	NEW JERSEY OHIO INDIANA MICHIGAN	1 84 3 1	5 194 6 2	9496 8132 8366 9255	4.0 4.6 4.3 4.8	384 370 354 443	60 1	8 2	8773 9820	400 536	2 1	8826 7401	466 374
	286937	PENNSYLVANIA OHIO	1 3	1 3	9470 7333	4.1 4.8	389 355							
	288933	OHIO	8	18	8520	4.7	398	3	5	9116	418	3	9034	441
	288934	OHIO INDIANA	41 2	124 4	8557 9009	4.7 4.5	396 405	27 1	8 12	8474 9297	379 438	3 3	8825 8902	556 426
	289033	OHIO	6	13	7701	5.1	392	3	6	7303	357	1	6638	303
	289148	OHIO	4	14	7421	4.8	354	1	6	8167	392			
	289179	OHIO FLORIDA	1 1	9 1	7488 5040	4.6 4.6	345 230	1 1	8 39	8153 9110	355 410	2	7837	286
	289246	MISSISSIPPI	1	2	5795	3.7	212							
	289677	OHIO	1	2	6540	5.4	351							
	291657	OHIO	3	5	6605	5.5	353							
	293096	OHIO	2	4	8135	4.4	356	1	2	6750	383			
	294229	OHIO INDIANA	22 1	51 2	7813 8585	4.9 5.4	382 465	13	7	8326	370	2	8058	360
	294251	PENNSYLVANIA	1	2	8315	4.6	379							
	294533	OHIO	5	16	7890	4.8	378	1	14	9080	440	3	9585	467
	297717	OHIO INDIANA	6 2	21 2	7971 9710	4.7 5.0	377 483	1	6	7385	351	6	7685	355
	297875	OHIO MICHIGAN WEST VIRGINIA	23 1 1	61 3 1	8002 10160 6300	4.8 5.0 5.0	384 511 316	13	6	8710	406	2	9307	418
	298463	OHIO	4	7	7956	5.0	389	1	2	8150	450	1	8055	414
	298806	OHIO INDIANA	73 1	154 1	7932 7720	4.8 4.9	378 374	52	9	8889	396	2	9139	486
	303703	OHIO	1	1	5830	4.7	272	1	7	9360	449	1	9723	434
	304487	PENNSYLVANIA OHIO WEST VIRGINIA	1 4 1	2 13 1	6400 7911 5730	4.6 5.0 5.0	293 410 287	1 4	14 7	7590 8479	383 392	1 3	7913 8618	379 399
	308231	PENNSYLVANIA OHIO	1 53	5 117	8962 8147	5.2 4.7	458 381	1 40	21 9	9354 8764	501 402	3 2	9141 8796	483 399
	314554	OHIO	1	3	7180	4.7	339	1	5	7190	329	2	7614	355
	324734	OHIO	10	24	6881	5.0	344	1	3	7440	390	2	8824	445
	326192	OHIO MICHIGAN	9 1	19 1	7741 7670	4.6 5.7	357 438	9	8	9047	394	2	8773	384
	329150	OHIO INDIANA KENTUCKY	56 1 2	109 1 5	8180 9340 7850	4.7 4.4 3.8	383 411 294	46 1 2	9 13 3	9220 9150 8978	414 395 394	2 1 1	8920 9897 8339	503 459 328
	333151	OHIO FLORIDA	49 1	88 2	7743 5450	4.8 5.1	370 278	37 1	10 21	9295 7620	416 347	2 2	9168 7592	410 355
	336053	NEW YORK PENNSYLVANIA	1 1	4 1	9133 7960	4.4 5.1	400 405	1 1	7 42	10318 9580	502 423	3	9087	442

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY		AV. FAT LB.	YEARLY HERD RECORDS		AV. FAT LB.
								NO. OAS.	RECORDS NO.		MILK LB.	FAT LB.	
		OHIO	42	121	8247	4.8	399	29	7	8737	400	2	8959
		INDIANA	1	1	7910	5.1	400						560
	342310	OHIO	4	11	8309	4.5	371	2	5	7245	358	1	8944
	342722	OHIO	1	1	10110	4.4	448						
	346204	OHIO	9	23	7727	4.9	378	5	16	8729	394	2	8900
	356939	OHIO	16	39	8368	4.7	392	15	15	8528	394	2	8750
	361347	OHIO	11	29	9268	4.4	413	6	7	9118	416	2	9281
	363771	OHIO	8	11	7564	4.5	346	8	16	10326	440	1	10044
	378091	PENNSYLVANIA	1	1	8390	5.2	438						
		OHIO	29	36	7167	4.6	327	23	13	8817	390	1	8707
	379278	OHIO	9	17	8625	4.6	395	8	6	9422	427	2	9225
	402953	OHIO	8	11	8383	4.7	396	7	13	10552	422	1	9744
	404083	OHIO	10	12	8925	5.0	439	10	11	9584	424		
		COLORADO	1	1	11320	4.7	529	1	9	13590	597		
	405764	OHIO	11	14	7818	4.9	378	10	8	9926	404		
	406717	OHIO	11	13	7257	4.4	321	9	9	8603	394	1	8899
	411989	OHIO	7	8	7901	5.0	394	7	9	8911	404	1	10000
	421509	OHIO	4	12	9263	4.2	383	4	17	8676	381	3	8501
		INDIANA	1	1	10050	3.6	366	1	13	9090	398	1	9897
	452454	OHIO	2	2	10290	4.7	480	2	16	9175	392		
	467982	OHIO	5	5	9586	4.6	436	5	10	9022	434	1	9162
	497382	OHIO	2	4	9800	4.4	428	2	19	9605	449	2	8584
	499077	OHIO	1	1	9140	4.8	435	1	1	7420	325	1	10769
	503223	OHIO	3	4	9400	4.9	452	3	4	9443	432	1	9956
	511515	OHIO	4	5	7890	4.6	364	4	8	9281	421	1	9055
	517080	OHIO	6	7	9358	4.8	442	6	19	9091	425		
	523078	OHIO	1	1	5290	4.6	243						
HOL.	688260	OHIO MICHIGAN	2	5	12308	3.1	382	1	2	11390	392	3	11104
			17	70	12900	3.5	447	4	4	14760	538	2	14423
	726056	NEW JERSEY	14	45	10968	3.7	409						
		INDIANA	3	8	13014	3.8	484	1	4	14633	572	2	13467
		ILLINOIS	147	391	10988	3.8	417	93	9	11922	440	2	11673
		WISCONSIN	18	68	12460	4.0	493	7	6	14029	535		
		MISSOURI	1	1	7900	3.6	282						
		NORTH CAROLINA	1	1	9360	3.8	553						
	741327	OHIO DELAWARE	25	68	12635	3.4	435	11	5	12794	445	2	12670
			1	3	12003	3.5	421	1	5	10593	371	2	9920
	750401	OHIO	7	23	11009	3.6	392	4	5	10657	388	1	10613
	754288	OHIO	8	16	10563	3.5	363	1	8	11343	376	1	10584
	756139	OHIO	1	4	10613	3.3	352	1	6	12258	401	2	10655
	769436	OHIO	140	302	12480	3.6	445	113	8	12508	443	2	12417
		INDIANA	1	1	9650	2.9	281						
		WEST VIRGINIA	2	5	11205	3.2	350						
	780769	PENNSYLVANIA	2	3	11255	3.8	424	1	27	10345	367	1	12884
		OHIO	56	143	11565	3.7	425	35	9	12552	433	2	12100
		MICHIGAN	1	6	15578	3.6	554	1	9	12465	479	3	14432
		KANSAS	1	3	15100	3.3	505					1	8938
		KENTUCKY	2	3	9075	3.8	547	1	2	8040	291	2	8584
		TENNESSEE	1	5	11966	3.5	422						325
	784291	OHIO	1	1	12450	3.8	468						
	785728	OHIO	5	8	11994	3.4	409	1	4	12423	397	2	10655

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LBS.	TEST PCT.	FAT LBS.	305-DAY NO. DAUS.	CONTEMPORARY RECORDS NO.	MILK LBS.	FAT LBS.	AV. RECORDS NO.	YEARLY HERD NO.	MILK LBS.	FAT LBS.
	785828	OHIO	1	2	11280	3.3	371								
	786366	NEW JERSEY	1	1	12760	3.3	419	1	13	11270	439	1	11456	437	
		OHIO	164	428	12362	3.5	429	122	9	12310	435	2	11951	428	
		INDIANA	1	3	15190	3.4	519	1	5	13480	495	3	13254	485	
		WEST VIRGINIA	1	1	10250	3.6	366	1	9	9100	316	1	10889	391	
		NORTH CAROLINA	2	3	11793	3.4	405	1	16	10765	375	1	10606	359	
		GEORGIA	1	5	16940	3.3	554	1	7	12412	467	3	12590	479	
		TENNESSEE	1	1	10010	3.5	353								
	790125	OHIO	23	60	10856	3.6	384	8	6	11734	412	3	12039	425	
		MICHIGAN	1	3	13967	3.0	427	1	7	13045	438	1	12099	422	
		DELAWARE	1	2	10810	3.5	383	1	5	9450	346	1	9429	342	
		GEORGIA	1	1	15570	3.3	507								
	800738	PENNSYLVANIA	1	3	12883	3.5	459	1	5	12537	469	2	12219	455	
		OHIO	104	277	11968	3.5	415	66	7	12196	425	2	12122	423	
		MICHIGAN	1	3	11047	3.4	381								
		GEORGIA	1	2	12680	3.2	412								
	804820	OHIO	33	80	12431	3.5	439	19	11	11888	418	3	12427	439	
		ARIZONA	1	1	16600	3.2	539	1	100	12050	430	1	13527	482	
	805453	OHIO	18	48	13681	3.3	448	4	6	12280	425	1	13825	480	
	813063	OHIO	36	86	10958	3.6	391	17	6	12293	442	2	12020	427	
		INDIANA	1	3	11240	3.4	390	1	3	13593	488	3	13353	468	
		ILLINOIS	1	1	10310	3.4	352	1	1	10300	355				
		KENTUCKY	1	2	12195	3.5	421	1	10	11685	412	2	11391	399	
	817046	PENNSYLVANIA	1	1	8370	3.5	292								
		OHIO	39	116	12679	3.4	430	13	6	12064	422	2	12072	420	
		KENTUCKY	1	1	8330	3.5	292								
	821644	NEW YORK	1	1	16390	3.4	552								
		OHIO	230	612	12372	3.4	420	179	7	12355	435	2	12143	430	
		MARYLAND	1	1	15420	3.6	560	1	6	16930	628				
		COLORADO	1	1	11340	3.2	368								
	823785	OHIO	12	31	14194	3.6	503	8	7	13009	447	3	11755	404	
	827663	PENNSYLVANIA	1	4	14495	3.0	431	1	6	13083	449	1	11543	414	
		OHIO	38	92	11896	3.5	415	16	5	12641	437	2	12613	434	
	836260	NEW YORK	1	1	13070	3.2	412								
		OHIO	222	528	12364	3.5	428	181	9	12435	438	2	12427	440	
		MARYLAND	1	3	10643	3.5	373	1	8	11897	420	2	10039	362	
		WEST VIRGINIA	1	1	10410	3.5	361								
		GEORGIA	2	10	14162	3.3	469	1	10	11764	479	3	12499	479	
		KENTUCKY	1	1	6810	3.8	258								
		TEXAS	1	1	17460	3.1	535	1	35	13050	432	1	12382	437	
		ARIZONA	1	2	12515	3.7	453								
	841766	OHIO	48	110	12011	3.4	410	39	7	12730	447	2	12567	446	
		NORTH CAROLINA	1	5	11858	3.6	429	1	15	12658	469	5	11868	442	
	872422	NEW JERSEY	1	2	14970	3.6	539								
		PENNSYLVANIA	1	1	10340	3.8	388	1	3	7690	333	1	5995	274	
		OHIO	509	1082	12374	3.4	424	483	9	12352	439	2	12362	440	
		INDIANA	1	2	14085	3.4	475	1	8	13170	483	2	14056	496	
		MARYLAND	2	2	13895	3.7	505	1	20	8060	393				
		VIRGINIA	1	1	10010	3.4	338								
		WEST VIRGINIA	3	4	9993	3.5	346								
		SOUTH CAROLINA	1	4	10273	4.0	408	1	15	11275	415	3	11409	415	
		TENNESSEE	2	3	12620	3.3	418								
	879153	PENNSYLVANIA	3	11	11793	3.5	409	3	14	9636	364	3	9947	379	
		OHIO	298	811	13209	3.4	445	233	8	12309	434	2	12245	435	
		MARYLAND	1	1	7500	3.4	253								
		WEST VIRGINIA	1	1	7610	4.1	310	1	1	7220	270	1	7685	265	
		GEORGIA	1	1	18850	3.5	652	1	22	12670	492				
	890281	NEW JERSEY	1	3	14060	3.2	450								
		OHIO	124	285	12286	3.6	435	120	11	12334	438	2	12302	440	
		MICHIGAN	1	3	10603	3.9	413	1	23	14703	509	3	14686	507	
		WEST VIRGINIA	2	5	15051	3.4	506	1	2	7350	360				
		GEORGIA	1	1	12250	3.5	426								
		KENTUCKY	1	2	11455	3.8	426	1	2	12815	489	1	11718	434	
	894515	NEW HAMPSHIRE	1	1	10350	3.6	371								
		OHIO	6	9	11858	3.5	405	3	7	11917	433	1	11347	403	
		INDIANA	1	1	11280	3.3	371								
		ILLINOIS	5	10	9635	3.5	338	1	12	12290	428	1	12143	436	
		MICHIGAN	1	6	12267	3.6	436	1	8	12896	478	2	11587	454	
		WISCONSIN	77	243	12268	3.4	422	28	11	12896	458	2	13291	475	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV. YEARLY HERO			
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
			IOWA	1	3	11473	3.4	392							
			MARYLAND	1	3	9410	3.7	349							
			GEORGIA	1	2	13345	3.7	489							
			ALABAMA	1	1	8720	3.3	292							
			TEXAS	1	7	12356	3.5	426	1	8	11350	399	3	10010	352
	905995		PENNSYLVANIA	2	2	11435	3.8	436	2	10	11320	450	1	10682	434
			OHIO	126	317	13371	3.4	455	119	8	12605	447	2	12584	453
			INDIANA	1	3	13170	3.6	482	1	14	9760	372	3	10460	392
			MICHIGAN	1	2	10185	3.3	331	1	9	9320	314	1	10704	366
			GEORGIA	1	1	16040	3.6	572	1	32	12600	466	1	12186	473
			KENTUCKY	1	1	11000	3.4	369	1	11	11650	416			
	908801		OHIO	84	164	11998	3.6	427	73	10	12320	438	2	12186	436
			WEST VIRGINIA	1	1	12480	3.3	414	1	2	12150	424	1	12884	473
			KENTUCKY	1	3	9037	3.7	333	1	5	9000	336	1	9865	358
	909428		OHIO	191	380	12412	3.5	434	185	10	12362	444	2	12650	455
			WEST VIRGINIA	2	2	8825	4.2	364							
			KENTUCKY	2	3	12588	3.8	468	1	13	11750	443	1	10388	391
	911841		PENNSYLVANIA	1	3	8683	3.6	310	1	11	10500	386	2	9134	345
			OHIO	111	257	12949	3.6	460	107	9	12217	429	2	12146	434
			SOUTH DAKOTA	1	1	13810	3.7	507	1	2	11430	481			
			GEORGIA	1	1	11750	3.9	463	1	26	12210	458	1	12186	473
	929717		OHIO	142	261	11422	3.6	403	134	10	12476	442	2	12421	443
	935783		OHIO	236	372	11713	3.8	437	223	13	12380	447	1	12545	452
			MICHIGAN	6	12	11614	3.9	447	6	18	13277	487	2	14469	512
			WEST VIRGINIA	3	3	11640	3.6	420							
			TEXAS	1	2	13165	3.1	406	1	6	14925	526	1	12677	432
	950390		OHIO	42	94	13318	3.4	455	35	10	12882	447	2	12595	440
	950391		OHIO	16	30	11121	3.4	376	16	8	12357	435	2	12146	450
	950725		OHIO	472	791	12725	3.6	453	448	10	12467	448	2	12695	456
			INDIANA	1	2	10245	3.4	343	1	6	12790	468	2	12273	448
			ILLINOIS	1	1	15190	3.4	519							
			MICHIGAN	3	5	12461	3.5	439	3	8	9846	362	1	10845	388
			TEXAS	1	1	13500	3.5	474	1	7	11400	413			
	956047		OHIO	46	75	13526	3.5	471	42	11	13070	468	2	12613	456
	981433		PENNSYLVANIA	1	4	14358	3.7	534	1	10	10235	378	3	11267	419
			OHIO	55	110	12678	3.7	465	53	10	12345	438	2	12450	446
			ILLINOIS	1	2	11285	3.5	391	1	18	12715	484	1	12775	481
			SOUTH CAROLINA	3	9	11287	3.9	428	3	13	11631	428	2	11308	406
			KENTUCKY	2	5	11167	3.7	405	2	11	10375	398	3	13814	492
			ARIZONA	1	2	12945	3.7	478	1	71	13310	461	2	13337	468
	991741		NEW JERSEY	1	1	14160	3.5	502							
			OHIO	367	527	12385	3.6	442	346	13	12408	449	1	12502	451
			INDIANA	3	3	14410	3.5	508	2	2	11510	434	1	11946	441
			MICHIGAN	7	7	13614	3.5	473	7	16	10069	373	1	11630	422
			WEST VIRGINIA	2	2	11160	3.6	402							
			SOUTH CAROLINA	1	1	9660	3.3	317							
	998262		OHIO	192	264	12234	3.6	439	181	12	12400	449	1	12434	469
			INDIANA	1	1	11200	4.1	459	1	9	14100	494	1	12175	419
			MICHIGAN	1	1	13930	3.8	535	1	3	15400	545	1	11837	423
			SOUTH CAROLINA	1	1	13950	3.3	464	1	18	7650	365	1	8055	368
	1013415		MAINE	1	1	15360	4.0	613	1	25	14440	573	1	14595	572
			NEW YORK	2	2	16400	3.9	634	2	39	15800	571	1	16209	607
			NEW JERSEY	1	1	15360	3.8	582	1	13	16980	638			
			PENNSYLVANIA	4	5	10050	3.8	383	4	12	11411	415	1	11835	439
			OHIO	514	617	12957	3.6	466	493	15	12563	459	1	12710	475
			INDIANA	11	12	13252	3.6	474	11	9	14447	533	1	13649	509
			ILLINOIS	1	2	18270	3.6	664	1	12	16610	626	1	15707	592
			MICHIGAN	12	13	12591	3.7	465	11	13	13262	478	1	13363	489
			MINNESOTA	2	2	12580	3.9	486	2	22	11965	419	1	12268	438
			IOWA	5	5	11720	3.9	455	5	9	13600	518	1	14890	557
			KANSAS	6	7	14883	3.5	525	5	8	13243	476	1	12944	475
			VIRGINIA	1	1	13230	3.8	507	1	12	15500	547	1	14214	524
			SOUTH CAROLINA	2	2	13015	3.1	405	2	83	10120	371	1	9941	364
			GEORGIA	1	1	15720	3.8	598	1	84	12850	473	1	13156	484
			KENTUCKY	1	1	11310	3.8	450	1	2	14630	484	1	12197	457
			ARKANSAS	2	2	17645	3.4	596	2	19	12155	437			
			MONTANA	4	4	15568	3.3	515	4	27	15443	510	1	15042	505
	1014100		OHIO	75	142	11774	3.8	449	70	10	12333	448	2	12795	465

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV. FAT LB.	YEARLY HERD		AV. FAT LB.
								NO. DAUS.	RECORDS NO.	MILK LB.		RECORDS NO.	MILK LB.	
JER.	1028963	OHIO	115	167	11820	3.9	459	111	14	12443	450	1	12845	463
		MICHIGAN	2	3	12518	4.0	496	2	16	12998	455	2	14879	515
		WEST VIRGINIA	1	2	10370	4.0	415							
	1053431	PENNSYLVANIA	1	3	11103	3.4	377	1	12	10950	427	3	12379	463
		OHIO	59	87	11341	3.6	409	56	15	12583	458	1	12695	461
	1054496	VERMONT	1	1	14820	4.1	611	1	1	13460	462			
		OHIO	306	356	12677	3.7	467	286	15	12289	449	1	12707	475
		INDIANA	3	3	16330	3.6	577	2	3	12070	466	1	13309	498
		TEXAS	2	2	13255	3.7	481	2	30	13115	455	1	11260	401
		COLORADO	1	1	13090	3.9	508							
	1070395	NEW YORK	1	1	15070	3.5	520							
		OHIO	18	27	13082	3.7	477	18	9	12469	453	1	13041	473
	1079736	VERMONT	2	2	13625	4.0	554	2	12	13100	552	1	16601	683
		MICHIGAN	1	1	14510	3.9	571	1	8	15750	588	1	16187	614
		NORTH CAROLINA	1	1	14980	3.4	516	1	10	12620	506	1	13472	528
	1084190	OHIO	15	15	13045	3.4	446	15	18	11730	437	1	12938	491
		MICHIGAN	1	1	11780	4.4	520	1	6	12610	453	1	12208	435
	1113350	NEW YORK	1	1	18230	3.3	608	1	33	14050	497	1	13036	458
		OHIO	19	19	13206	3.6	474	12	11	13230	488	1	13290	485
		INDIANA	1	1	8910	4.1	363	1	3	8960	325			
		ARIZONA	1	1	18730	3.4	641	1	6	16950	601			
		WASHINGTON	11	11	14042	3.9	541	11	10	13786	534	1	13642	532
		CALIFORNIA	36	39	14919	3.8	562	36	62	15316	566			
	1121706	RHODE ISLAND	3	3	17433	3.6	633	3	4	11650	430	1	13727	497
		OHIO	73	74	13112	3.9	511	69	15	12817	467	1	12714	455
		INDIANA	8	8	14543	4.0	577	8	15	13950	538	1	14248	542
		MICHIGAN	1	1	10660	3.8	410	1	9	9130	343	1	10867	402
		TEXAS	1	1	16230	4.0	642	1	6	13240	488	1	18192	697
	1126687	OHIO	118	122	12428	3.7	459	115	16	12609	463	1	12774	465
		INDIANA	1	1	10560	4.3	458	1	1	15420	601	1	13309	498
	MICHIGAN	5	6	11362	3.9	444	5	6	11036	413	1	12804	497	
	MISSOURI	1	1	15120	3.6	546	1	10	13710	493				
	SOUTH CAROLINA	1	1	10040	3.5	355	1	14	7990	366				
1137503	MISSOURI	3	3	12747	3.9	495	2	5	9240	401				
1138441	INDIANA	2	2	14225	3.3	462	2	8	11055	391				
	MICHIGAN	1	1	15090	3.6	543	1	16	13150	456	1	14955	548	
1138451	VIRGINIA	11	14	14312	3.7	531	10	63	14920	611	1	11585	459	
	COLORADO	1	1	15050	3.8	578	1	5	11800	429	1	10301	420	
	WASHINGTON	1	1	10010	4.2	418	1	3	15000	642	1	13799	583	
	OREGON	1	1	9800	3.2	314	1	16	14200	501	1	14628	514	
	CALIFORNIA	48	58	14751	3.8	563	47	47	15622	591				
1153208	OHIO	21	35	11592	3.7	423	19	14	12835	464	2	12461	445	
1170467	OHIO	17	26	11999	3.8	452	17	14	13060	472	2	12970	462	
1188952	OHIO	30	40	14123	3.5	489	30	21	13489	483	1	13249	468	
1210614	OHIO	3	3	13177	3.4	440	3	18	13073	494	1	14503	522	
	KANSAS	1	1	10160	3.6	363					1	13603	502	
1221761	OHIO	71	77	12766	3.8	483	69	16	12089	440	1	12285	439	
	INDIANA	1	1	15090	3.7	559	1	15	13620	492	1	12600	468	
	MICHIGAN	2	2	15925	4.0	615	2	3	14565	551	1	14099	501	
	SOUTH CAROLINA	1	1	10000	3.8	383	1	32	10730	378	1	10497	375	
	TEXAS	1	1	16990	4.1	701	1	27	13570	521				
1246183	OHIO	77	95	12507	3.5	433	71	15	12860	459	1	12735	456	
	INDIANA	3	4	16502	3.0	506	3	10	16435	602	1	15311	553	
	MICHIGAN	3	3	13630	3.7	502	3	14	14523	535	1	15289	571	
	SOUTH CAROLINA	1	1	11140	3.5	40	1	1	4390	191	1	10497	375	
	TEXAS	1	1	13170	3.7	484	1	31	14620	550				
1260267	OHIO	23	23	11736	3.3	389	23	18	11971	436	1	12455	446	
	IOWA	2	2	13765	3.6	500	2	8	9440	362	1	11979	452	
1281049	OHIO	7	7	12893	3.7	475	7	12	13161	492	1	13639	505	
344296	OHIO	1	2	8720	4.8	423								
346783	OHIO	2	2	6540	5.6	364								

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAS.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
	361321	OHIO	1	2	6965	4.9	336							
	365436	OHIO	1	3	6627	6.0	396							
	371000	PENNSYLVANIA	1	5	7068	6.3	445	1	8	7648	398	2	7336	373
		OHIO	11	34	6856	5.5	374	3	5	8512	453	1	8807	460
		WISCONSIN	1	6	7082	4.9	349	1	9	7583	424	1	7281	401
	371077	PENNSYLVANIA	1	10	9307	4.9	457	1	22	6690	346	6	6598	335
		OHIO	13	40	8025	5.3	422	2	6	7455	388	1	8546	455
	372936	OHIO	23	47	7068	5.3	365	4	4	8309	420	4	8592	451
	374737	OHIO	8	26	8239	5.0	412	4	7	7848	430	2	8066	438
		SOUTH CAROLINA	1	4	9595	4.3	410							
	377426	NEW YORK	1	1	3760	4.6	172							
		OHIO	15	44	7371	5.5	396	9	3	7189	396	2	8675	463
	380510	OHIO	5	10	5992	5.8	346	3	2	7743	449			
		SOUTH DAKOTA	1	2	4715	6.5	305							
	386162	TENNESSEE	2	2	8740	4.9	429							
	386656	PENNSYLVANIA	1	2	4470	5.6	251							
		OHIO	21	34	7375	5.3	394	4	5	8558	414	3	8150	381
		WISCONSIN	1	6	10373	5.6	584	1	13	7898	433	4	7232	404
	387213	OHIO	34	95	7415	5.4	400	8	6	8607	436	2	8194	433
	387422	OHIO	21	54	8194	5.3	424	3	2	7129	369	2	7067	367
		WEST VIRGINIA	1	1	5100	5.1	262							
	395486	OHIO	13	38	7212	5.3	381	5	4	8622	446	2	8601	445
	398815	OHIO	4	6	6562	5.3	347							
	400955	OHIO	6	17	7639	5.6	428	3	9	7164	372	3	7537	405
	403112	PENNSYLVANIA	1	1	6240	6.5	405							
		OHIO	12	26	7211	5.2	373	1	3	6678	358	3	7507	408
	404921	NEW JERSEY	1	2	4990	5.5	277							
		OHIO	13	41	6913	5.5	378	4	14	6608	343	3	6384	331
	405072	OHIO	3	9	6405	6.0	386	2	20	7187	370	3	6938	359
	405160	OHIO	24	55	7251	5.2	376	12	4	8097	445	2	7723	408
	406548	OHIO	2	9	7727	5.7	433							
	406981	OHIO	1	3	6113	5.7	345							
	406983	OHIO	16	33	7837	5.3	407	1	10	8300	374			
		FLORIDA	1	1	7620	4.7	360							
	416495	OHIO	12	39	7817	5.3	414	2	12	8918	471	2	8985	474
	417243	OHIO	11	24	6216	5.6	348	3	5	8413	426	2	7277	373
	419064	OHIO	1	2	8580	5.0	428							
	425960	NEW YORK	1	1	7580	5.2	394							
		PENNSYLVANIA	1	1	6080	5.7	349							
		OHIO	81	185	7509	5.1	382	47	8	7951	416	2	8019	425
		NORTH CAROLINA	2	3	6230	4.9	303							
		TENNESSEE	1	2	8155	5.5	443							
	430246	OHIO	14	28	6932	5.1	347	5	8	8227	427	2	7702	414
	432741	OHIO	20	42	6813	5.4	366	16	9	7924	404	2	7206	372
	438877	PENNSYLVANIA	2	6	7803	5.2	402	2	24	7770	398	1	6878	342
		OHIO	39	89	7927	5.1	401	27	11	8121	423	2	8277	433
	439617	OHIO	14	27	7536	5.0	367	10	9	8015	393	1	7266	377
		ALABAMA	1	1	4370	4.7	204							
	440103	MAINE	1	1	3480	4.5	156							
		CONNECTICUT	3	6	8974	5.6	503							
		PENNSYLVANIA	1	1	7060	5.7	404	1	32	8460	436	1	9091	470
		OHIO	61	120	7405	5.3	393	39	11	8252	430	2	7978	419
		INDIANA	1	1	10130	5.5	553							
		WISCONSIN	1	1	10340	5.1	530	1	12	8190	424			
		NORTH CAROLINA	1	1	8140	4.7	384							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY		AV.		YEARLY HERO		AV.	
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	
		GEORGIA	1	1	5860	5.1	296	1	45	6250	326	1	7695	376	
	441643	PENNSYLVANIA	1	7	6897	5.7	392	1	19	8380	432				
		OHIO	3	7	7342	6.3	458	3	7	8012	438	2	6900	381	
	446431	OHIO	20	56	6911	5.0	347	10	9	8090	410	3	8130	427	
		FLORIDA	1	1	7870	4.9	389								
	447723	OHIO	6	21	6973	5.6	385	2	3	8548	458	1	7521	402	
	447998	OHIO	3	5	7107	5.5	378	2	16	7995	433	1	8175	455	
	448639	NEW YORK	1	1	6830	4.9	336								
		OHIO	6	14	6625	5.6	367	2	7	7499	386	2	7412	391	
	454006	PENNSYLVANIA	1	3	6880	5.1	352								
		OHIO	21	39	6890	5.4	372	14	14	7384	398	2	7429	407	
		MICHIGAN	1	2	5390	5.1	274	1	19	7530	392				
	454032	OHIO	15	49	7600	5.1	386	10	9	7955	418	3	8009	424	
	456612	NEW YORK	1	1	8320	5.4	453								
		OHIO	19	36	7483	5.3	394	11	9	7828	407	2	7961	416	
	459579	OHIO	13	22	7173	5.5	397	8	13	8511	449	2	8359	447	
	462464	OHIO	8	9	8519	5.3	453	8	11	8145	433	1	8770	474	
	476142	OHIO	13	20	7759	5.8	449	10	13	9003	472	2	7693	409	
	479081	OHIO	23	35	8422	5.0	421	14	13	7972	425	1	8541	450	
		MICHIGAN	2	2	6145	5.4	330								
		WISCONSIN	1	4	10563	4.9	518	1	15	7368	401	2	7270	400	
	497574	MASSACHUSETTS	10	13	11902	5.3	634	10	87	10664	577	1	11114	568	
		NEW YORK	2	4	11524	5.5	626	2	37	8695	482	2	9412	523	
		VIRGINIA	1	2	10390	5.4	564	1	103	9950	492				
	503160	OHIO	13	23	7890	5.3	423	12	10	8169	427	1	8470	450	
		INDIANA	1	1	10080	5.1	517								
		WISCONSIN	2	2	7960	4.8	380	2	9	8395	442				
	503535	OHIO	34	43	7388	5.0	368	32	16	7327	383	1	8226	423	
		INDIANA	3	5	9260	5.2	473	3	8	9710	504	2	8899	485	
		WISCONSIN	2	2	9725	5.2	502	2	11	8110	420				
	503968	OHIO	52	70	7400	5.4	395	44	11	7709	398	1	8150	414	
		INDIANA	2	2	8910	5.0	431	1	3	7390	349	1	8698	426	
	511001	OHIO	12	13	8073	5.8	463	12	14	8743	463	1	8829	472	
	512545	OHIO	85	106	8332	5.1	420	74	14	7791	409	1	8270	438	
		INDIANA	5	5	8486	5.1	422	2	9	9850	518	1	8764	472	
		WISCONSIN	1	1	9230	5.8	536	1	6	8200	421				
		IOWA	2	3	8075	4.8	383	2	24	10455	475	2	8606	442	
		TEXAS	4	4	7948	5.1	418	4	94	7938	411				
		ARIZONA	1	1	7170	4.5	320	1	3	9440	503	1	9690	501	
	527147	OHIO	17	21	7853	5.1	403	15	11	7715	407	1	8562	462	
		INDIANA	1	1	9060	5.3	483	1	8	10330	534	1	8764	472	
	529293	OHIO	30	38	7727	5.1	403	26	9	7671	397	1	8171	427	
	544397	OHIO	2	2	7990	5.6	443	2	11	8925	469				
	562315	NEW JERSEY	1	1	7250	5.6	408					1	11848	458	
		OHIO	43	58	8460	5.2	443	42	16	7834	409	1	8031	422	
	567066	OHIO	28	34	6759	5.5	374	25	14	7330	381	1	7714	412	
	569635	OHIO	14	15	7454	5.1	371	10	18	8199	428	1	8133	436	
		WISCONSIN	1	1	8100	5.1	410	1	27	7100	374	1	8415	452	
B.S.	33535	PENNSYLVANIA	1	1	9140	3.7	335								
		OHIO	2	4	9447	4.1	394	2	3	10862	453	1	9112	372	
	40901	OHIO	8	16	8463	4.5	377	1	5	14490	578	1	10715	446	
	43300	OHIO	2	3	15638	4.0	586								
	47450	OHIO	2	7	10977	4.1	449								
	48699	OHIO	2	2	14010	4.2	570								

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.			
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	
003	GUER	49268	OHIO	3	9	14430	4.1	589								
		53681	OHIO	1	1	11350	3.6	428								
		61564	VERMONT	1	3	10833	4.4	478								
			NEW YORK	1	1	10510	4.4	467								
			OHIO	13	27	9753	4.2	409	6	5	10076	429	2	8969	371	
		61567	VERMONT	3	13	9877	4.5	441	1	5	11520	483	5	9426	412	
			NEW YORK	1	1	4750	5.0	239								
			OHIO	46	79	10794	4.3	462	23	7	10474	436	1	10674	432	
			INDIANA	1	1	8830	4.1	362								
			MARYLAND	1	1	11310	4.0	451	1	22	11520	470	1	10715	421	
			TEXAS	1	1	10250	4.2	434	1	23	12200	474				
		66102	OHIO	36	79	11283	4.1	463	15	8	10162	414	2	10258	416	
			MICHIGAN	2	3	9180	3.9	353	1	1	3790	169	1	10148	428	
		278397	OHIO	1	3	9107	5.0	451								
		004	GUER	666968	NEW YORK	1	2	13225	3.7	493						
	OHIO			34	84	11266	3.6	395	5	7	13216	458	2	11078	387	
	WEST VIRGINIA			1	3	12933	3.6	459								
382743	CONNECTICUT			1	3	7320	5.6	401								
	OHIO			3	12	8438	5.2	434	2	10	7590	374				
252152	OHIO			12	25	8998	4.6	411	1	3	9350	411	1	8785	409	
	INDIANA			1	1	9870	4.6	450								
267591	OHIO			3	5	6798	5.3	365								
286293	OHIO			4	8	8064	4.6	369	1	3	7895	365	1	7052	385	
312441	KENTUCKY			1	4	8435	4.7	390	1	7	10260	417	1	9396	391	
327927	OHIO			11	38	8844	4.7	414	1	9	8595	416	4	8355	433	
346882	OHIO			3	9	8116	4.9	389	1	2	7756	380	2	7069	360	
HOL.	716630			OHIO	10	25	11839	3.7	435							
739983	OHIO			12	49	10383	3.4	354	3	5	11974	424	5	11600	404	
773963	OHIO			13	32	12438	3.4	426								
005	GUER	785376	OHIO	94	230	11366	3.5	400	39	8	11975	428	2	11987	434	
			INDIANA	1	2	13335	3.5	462								
			TEXAS	1	5	13638	3.5	479	1	12	13198	470	3	11456	404	
		798846	OHIO	57	166	12582	3.5	438	36	6	12923	448	2	12532	437	
			INDIANA	2	7	12228	4.3	520	1	2	16440	615	4	15682	605	
		800852	OHIO	7	26	12946	3.5	453	4	5	13435	474	3	13022	475	
		800912	OHIO	2	10	14938	3.0	441								
		815907	PENNSYLVANIA	1	1	8840	3.7	325	1	8	9700	341	1	8437	307	
			OHIO	29	65	11218	3.5	396	10	6	12915	448	2	12350	437	
			WEST VIRGINIA	1	1	8760	4.0	349								
			KENTUCKY	1	1	9620	3.5	335	1	4	8270	426	1	8240	376	
		850998	OHIO	29	72	11965	3.6	427	12	8	12704	441	2	12110	425	
			MICHIGAN	1	1	17310	3.0	522								
		JER.	392896	OHIO	6	11	6283	5.4	341							
		426359	OHIO	1	4	8385	4.9	411	1	3	8263	387	1	8687	405	
8.S.	46136	OHIO	2	5	9179	4.2	380									
	IOWA	1	1	12740	4.2	538										
46163	OHIO	13	38	10998	4.2	462	6	5	11205	453	3	10959	445			
237700	OHIO	1	4	7663	4.7	359										
239361	OHIO	1	4	5405	4.8	260										
252871	OHIO	9	23	7300	4.6	332	5	4	8845	387	3	9928	439			
	INDIANA	1	2	10300	4.9	498										
	MISSOURI	1	1	10200	4.8	491										
256236	OHIO	3	14	7857	4.9	380	1	5	7166	346	1	8219	395			

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAUS.	CONTEMPORARY NO. RECORDS	AV. MILK LB.	FAT LB.	YEARLY NO. RECORDS	HERO MILK LB.	AV. FAT LB.
		264083	OHIO	1	1	7710	4.4	337							
		265148	PENNSYLVANIA OHIO	2 4	4 15	7789 7630	4.8 4.8	371 365	3	6	7943	389	2	7781	377
		272585	OHIO WEST VIRGINIA	2 1	10 2	7978 6420	5.2 5.3	409 338	2	5	8548	413	3	8463	412
		275389	OHIO NORTH CAROLINA	46 1	105 1	7249 11130	4.7 3.9	337 434	21	7	8815	387	2	8772	390
		285933	PENNSYLVANIA OHIO WEST VIRGINIA	2 12 1	7 35 1	7815 7873 8410	4.5 4.8 4.8	354 372 403	1 3	6 7	8707 7856	336 379	2 1	10094 7414	358 361
		296949	OHIO	1	3	7557	4.1	308							
		302655	OHIO	1	2	5130	5.0	257	1	4	7785	345	1	7052	385
		312081	OHIO INDIANA	7 1	24 1	8507 8530	4.7 4.5	396 382	5	5	9323	411	2	9164	420
		335524	OHIO	4	11	7389	4.8	353	3	10	7996	370	2	8275	380
	HOL.	689195	OHIO	36	84	10347	3.6	374	5	11	11396	415	2	11956	429
		782488	OHIO WEST VIRGINIA	11 1	27 2	12379 11005	3.4 3.6	419 392	1	1	11200	505	1	12688	438
	JER.	368454	NEW YORK PENNSYLVANIA	1 1	3 1	9290 9500	5.5 5.6	511 528							
		386960	OHIO	1	2	6500	4.9	316							
		395208	PENNSYLVANIA OHIO	1 1	1 2	6060 7515	5.2 5.1	315 387							
		395594	OHIO	6	17	7890	4.8	378							
		402647	OHIO	1	1	8780	4.2	367							
		409759	PENNSYLVANIA OHIO	2 5	2 11	6110 8095	5.6 5.6	342 454							
		488280	PENNSYLVANIA OHIO NORTH CAROLINA	3 23 1	9 43 2	8834 7974 7630	5.0 5.6 5.6	440 446 422	3 14	15 10	8307 8148	411 427	1 2	8728 8407	423 452
006	GUER	258185	OHIO	5	9	7154	4.8	341	1	1	7193	359			
		260958	OHIO	3	5	8922	4.2	372	1	4	7350	336	2	7134	328
		261486	OHIO	3	3	6200	5.0	304							
		298460	OHIO	5	5	7460	4.9	358							
	HOL.	697599	OHIO INDIANA WEST VIRGINIA	34 1 1	96 1 1	11132 15000 11380	3.4 3.1 3.7	330 463 416	18	8	10937	395	2	11029	397

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAS.	CONTEMPORARY NO.	MILK LB.	AV. FAT LB.	YEARLY HERD NO.	MILK LB.	AV. FAT LB.
002	GUER	325503	INDIANA	2	2	10255	4.8	483	2	2	8675	406	1	9189	431
		443636	INDIANA	2	4	9900	5.3	515	2	19	10270	492	1	9756	487
			ILLINOIS	1	1	7100	3.9	277	1	15	6960	318	1	7412	342
		461109	INDIANA	1	2	8200	4.7	386	1	5	9695	445	2	9282	456
	HOL.	904444	INDIANA	1	1	11890	3.4	403	1	8	11530	420	1	11870	432
		943293	NEW YORK	4	4	13013	3.6	464	2	9	14410	534	1	13750	495
			NEW JERSEY	2	3	13998	3.9	542							
			PENNSYLVANIA	3	7	12587	3.3	418	3	14	11771	424	1	11863	424
			OHIO	4	6	12608	3.6	457	3	7	12490	424	2	13077	464
			INDIANA	145	274	13839	3.7	515	131	7	14087	532	2	13459	507
			ILLINOIS	21	45	15438	3.8	580	21	22	13657	525	2	14612	545
			MICHIGAN	8	16	13951	3.9	536	5	8	14290	522	2	14131	523
			WISCONSIN	2	6	12239	3.5	425	2	14	13298	483	4	11674	439
			MINNESOTA	1	1	12680	3.0	385	1	33	13780	501	1	12263	447
			IOWA	3	8	16182	3.6	589	3	10	14853	553	2	14541	533
			VIRGINIA	1	2	7410	3.7	278							
			GEORGIA	3	8	13256	3.7	485	3	19	13568	495	2	12704	471
			FLORIDA	3	9	9147	3.5	313							
			KENTUCKY	7	14	14107	3.5	498	7	10	12506	450	2	12759	457
			TEXAS	1	1	13250	3.5	469	1	85	11880	409			
		962404	INDIANA	13	25	13100	3.8	496	12	8	13569	489	2	13094	479
			ILLINOIS	1	5	12886	3.6	461	1	6	14984	502	4	15078	513
			MICHIGAN	1	1	13230	3.5	464	1	8	9380	459			
			FLORIDA	2	7	8513	3.3	275	2	3	7780	302	2	7132	288
		978998	INDIANA	18	26	13077	3.9	501	16	6	13575	504	2	12941	487
			WISCONSIN	1	2	13260	3.8	506	1	8	13985	493	1	14541	543
		990559	OHIO	1	1	17930	4.1	729	1	2	13870	509			
			INDIANA	73	155	13694	3.7	504	65	9	13724	521	2	13345	501
			MICHIGAN	3	7	12591	3.3	425	3	12	12716	458	2	12834	458
			WISCONSIN	1	1	15520	3.5	538	1	39	13260	496			
			GEORGIA	4	9	14828	3.8	562	3	37	14740	546	1	13952	504
			ARIZONA	2	2	11440	3.5	400	2	60	13335	471	1	12083	428
		1028260	NEW YORK	3	3	12503	4.0	494	2	40	11485	420			
			OHIO	5	5	13344	3.4	452	5	11	14680	522	1	14764	526
			INDIANA	5	9	10603	3.4	359	5	8	12106	442	2	12266	439
			MICHIGAN	3	3	12083	4.2	502	3	19	15057	613	1	15925	590
			VIRGINIA	1	1	6680	3.8	257							
			WEST VIRGINIA	1	1	8420	5.0	420	1	7	10820	472	1	12797	497
			KENTUCKY	1	2	12880	3.7	467	1	11	11720	422	2	11761	422
		1032358	NEW YORK	2	9	12449	3.5	437							
			INDIANA	16	39	14044	3.7	520	14	9	13918	522	2	14021	533
			ILLINOIS	2	9	15457	4.1	633	2	10	13617	508	3	13976	521
			MICHIGAN	1	1	17590	3.1	551	1	6	17350	653	1	15467	586
		1049307	INDIANA	1	3	14667	3.5	512	1	2	12977	501	2	10371	396
			FLORIDA	2	4	8860	3.4	301	1	9	9560	336	1	8698	337
			WASHINGTON	1	1	11540	3.7	430	1	16	13650	512	1	13625	499
		1160414	NEW YORK	1	1	9550	3.8	367	1	18	9760	380			
			PENNSYLVANIA	1	3	10740	4.3	455	1	10	11230	428	3	11332	428
			INDIANA	72	102	13147	3.9	511	69	8	13689	518	1	13215	501
			ILLINOIS	6	3	13904	3.8	526	6	18	12722	479	1	12889	484
			MICHIGAN	1	1	13250	4.0	530	1	4	19210	699			
			NORTH CAROLINA	2	2	11980	3.6	429	2	21	12515	452	1	12873	474
			SOUTH CAROLINA	1	1	15460	3.4	524	1	6	14280	504			
			GEORGIA	2	6	13214	3.8	495	2	14	13049	475	2	11831	448
		1172141	INDIANA	43	56	12963	3.6	467	38	11	13839	516	1	13213	498
			ILLINOIS	4	4	12265	3.6	444	4	9	12928	486	1	14233	534
			MICHIGAN	2	2	11465	3.4	392	1	18	13460	479	1	14225	495
			IOWA	1	2	12845	3.5	448	1	17	9925	406	2	11107	440
			VIRGINIA	1	1	7260	3.5	255							
			SOUTH CAROLINA	1	1	15850	3.1	498	1	6	14210	508			
			ARIZONA	1	1	15920	3.4	534	1	16	14080	478			
		1209569	INDIANA	15	18	13420	4.0	529	12	14	13541	511	1	13529	521
		1211335	INDIANA	2	2	13355	3.8	505	1	6	14830	558	1	15413	577
			MICHIGAN	1	1	14220	3.6	516	1	15	14910	530	1	13636	486
		1234371	INDIANA	7	10	13082	3.8	487	7	9	13505	501	1	13963	534
			ILLINOIS	1	1	13950	3.8	526	1	16	12730	466	1	13745	512
			SOUTH CAROLINA	1	1	14270	3.5	501	1	6	14470	508			
			KENTUCKY	1	2	14020	3.4	478	1	3	12620	441	2	11080	398
			ARIZONA	1	1	10580	3.4	356	1	16	14410	489	1	13462	476

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FRDM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY DAUS.	CONTEMPORARY RECORDS NO.	AV. MILK LB.	FAT LB.	YEARLY RECDRDS NO.	HERD MILK LB.	AV. FAT LB.	
003	GUER	1239479	INDIANA	2	2	12195	3.9	474	2	23	13265	497	1	14279	550	
			MICHIGAN	1	1	15540	3.8	593	1	11	15410	572	1	14955	573	
			GEORGIA	1	1	13100	3.6	476	1	84	12880	475	1	13156	484	
		1239480	INDIANA	1	2	18160	3.8	684	1	29	13290	525	1	14530	579	
			ILLINOIS	1	1	14840	3.6	528	1	16	12670	466	1	13745	512	
			B. S.	85918	INDIANA	4	6	9892	4.2	417	3	4	10168	426	2	8145
		312077	OHIO	2	7	9234	5.2	477	2	8	9604	449	2	8860	422	
			INDIANA	2	6	8361	4.9	391	1	3	12476	630	3	10453	533	
			KENTUCKY	1	2	4660	5.5	252								
		318429	CONNECTICUT	1	4	10215	5.3	539	1	46	11813	603	4	11737	588	
			NEW YORK	2	3	5425	5.1	274								
			NEW JERSEY	3	8	6941	5.1	356	1	3	8775	444				
	343525	PENNSYLVANIA	8	13	6497	5.2	339	4	11	9453	440	2	10370	465		
		INDIANA	9	26	7324	5.8	423	4	4	9075	470	2	8341	437		
		MICHIGAN	1	3	8667	5.5	469	1	8	9287	442	1	9418	435		
	HOL.	345691	INDIANA	1	1	9300	4.5	417								
		345691	INDIANA	3	7	9240	5.5	502								
		365641	INDIANA	7	12	7736	5.6	434	5	5	8425	450	2	8534	442	
		386145	OHIO	1	3	9160	5.0	460								
			INDIANA	5	15	9161	4.7	423	4	6	8637	418	3	8597	411	
		413436	NEW JERSEY	1	5	7280	5.4	391								
			INDIANA	2	11	9253	5.4	491	2	3	8498	431	3	9547	488	
			MICHIGAN	2	5	8641	5.2	444	2	2	9345	457	2	10759	493	
418242		INDIANA	1	1	6860	5.6	380	1	5	7930	415	1	8622	462		
435258		INDIANA	1	4	10260	4.9	498	1	1	8975	480	3	9937	513		
004		844853	INDIANA	18	60	13730	3.9	536	15	6	14048	519	3	13253	498	
	MICHIGAN		1	1	14100	3.4	475	1	32	14760	543					
	882935	INDIANA	10	24	14082	3.7	525	5	6	13617	530	3	13917	548		
	919125	INDIANA	3	8	14005	3.9	545	3	13	14160	513	2	14617	542		
	949766	INDIANA	20	71	13540	3.5	470	16	5	13457	477	3	13329	475		
		MICHIGAN	1	1	17750	3.9	686	1	2	14150	500	1	16623	613		
		TENNESSEE	1	1	10010	3.8	376									
	954932	OHIO	1	1	8890	3.6	319									
		INDIANA	28	75	12505	3.7	467	11	4	13887	505	3	12804	477		
		ILLINOIS	2	5	9946	3.8	369	1	3	9597	353	1	9025	308		
MICHIGAN		3	14	12732	4.0	502	3	7	12733	467	2	12126	450			
JER.	445349	INDIANA	2	5	6847	4.8	320	1	6	8873	458	3	8876	449		
B. S.	59814	OHIO	6	8	8012	4.2	337	1	2	10155	417	1	10519	446		
		INDIANA	9	24	9337	4.0	371	1	3	7993	342	1	8502	355		
JER.	437211	INDIANA	2	6	10435	4.5	471									
005	JER.	450099	INDIANA	1	1	7240	5.7	414								
		450101	INDIANA	1	1	5480	6.3	348								
		384546	PENNSYLVANIA	24	62	7492	5.4	403	4	9	8052	412	2	7896	434	
	403239	DELAWARE	26	108	7899	5.2	405	9	8	7022	368	2	8171	437		
		MARYLAND	2	9	8762	5.3	458	1	6	7554	405	3	8160	428		
		VIRGINIA	1	1	7590	5.3	404									
	406868	INDIANA	1	3	7727	5.5	425									
		MARYLAND	5	16	11085	5.4	593									
		NEW YORK	1	1	9250	5.6	516									
	426542	INDIANA	6	7	5646	5.7	325									
		NORTH CAROLINA	2	3	6248	5.1	316									
		FLORIDA	2	5	6497	5.6	362									
	432668	ILLINOIS	7	13	7088	5.5	385	1	15	9230	518	1	10431	583		
	437857	ILLINOIS	2	2	8530	5.4	462	1	1	6400	387					
	446985	INDIANA	2	5	7565	4.8	363	1	22	6960	335					
MICHIGAN		1	1	8470	5.7	481										
MARYLAND		1	1	5390	5.3	287										

STUD	Breed	Sire No.	Records from State	Daughters No.	Records No.	Milk Lb.	Test Pct.	Fat Lb.	305-Day		Contemporary		Av.		Yearly		Hero	Av.
									No. Daus.	Records No.	Milk Lb.	Fat Lb.	Records No.	Milk Lb.	Fat Lb.			
006	HOL.		NORTH CAROLINA	6	16	6767	5.3	358	4	10	8768	414	3	7989	384			
			GEORGIA	2	4	5314	5.1	275										
			FLORIDA	3	8	5653	4.9	275	3	32	7629	375	2	7355	362			
			TENNESSEE	2	2	5860	5.7	330										
			INDIANA	2	3	12400	3.3	401	2	27	13863	479	1	14077	491			
			INDIANA	3	20	11046	3.4	376	3	29	12466	401	3	13025	441			
			INDIANA	3	14	12347	3.3	399	3	23	12053	414	2	12079	414			
			INDIANA	30	91	12829	3.4	427	14	26	12735	421	2	12735	438			
			INDIANA	37	74	12022	3.4	401	35	30	12170	392	2	12436	421			
			INDIANA	16	29	11246	3.6	396	16	12	12729	430	2	11876	415			
			MICHIGAN	2	4	14177	3.2	450	2	13	15330	586	2	15636	558			
			INDIANA	16	34	12809	3.5	451	16	16	13573	450	2	12761	450			
		007	HOL.		INDIANA	1	2	10600	3.7	386								
					MICHIGAN	1	2	14850	3.4	500								
	INDIANA			22	66	12824	3.6	464	3	9	11988	420	2	12118	415			
	ILLINOIS			1	6	11045	3.7	405	1	4	10800	404	1	10148	366			
			MICHIGAN	1	1	12360	3.5	428	1	12	12030	419	1	11020	379			
			INDIANA	10	21	12746	3.7	476	1	1	15095	519	1	11020	411			
			INDIANA	1	3	12430	3.4	422										
			INDIANA	4	7	7743	5.0	387	1	3	8260	458	1	9777	484			
009	GUER		INDIANA	11	28	7527	5.3	394	5	5	9048	448	3	9085	454			
			MICHIGAN	1	2	8890	4.8	424										
			INDIANA	6	11	8066	5.3	423	2	5	8063	395	3	8409	412			
		HOL.		INDIANA	1	1	11690	3.7	435									
				INDIANA	9	17	11147	3.6	396	9	11	12074	412	2	11686	397		
				IOWA	1	3	17687	4.0	703	1	7	15830	526	2	15615	562		
			MISSISSIPPI	1	1	9560	3.7	350	1	10	11920	424						
010	GUER		OHIO	1	1	6770	4.7	320	1	19	8180	315						
			INDIANA	5	13	8349	4.6	383	4	6	8655	359	3	10118	421			
			MISSISSIPPI	1	4	5388	4.8	261										
			ILLINOIS	1	1	9390	5.1	474	1	3	10980	510	1	9178	421			
			INDIANA	4	10	8467	5.1	423	1	1	11692	506	5	10046	446			
			INDIANA	4	11	7890	4.9	374	1	5	9365	424	6	10023	456			
		HOL.		INDIANA	5	6	13136	3.5	458	5	9	12885	471	1	12409	460		
	MICHIGAN		1	1	4690	4.1	192	1	49									

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY RECORDS NO.	AV. MILK LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.	
		840197	INOIANA	4	10	15008	3.5	514	1	8	13950	474	1	12633	436
		855061	INOIANA	1	7	14144	3.3	458	1	5	14040	479			
		946165	INOIANA	10	35	13940	3.7	506	6	9	16700	583	3	15686	542
	JER.	351545	INOIANA KENTUCKY	5 1	9 3	8029 7177	5.2 4.6	414 330							
		387275	INOIANA	4	9	5743	5.0	288							
		448941	INOIANA	15	39	6435	5.3	336	7	8	6681	337	2	6828	348
		449171	INOIANA IOWA	1 1	5 1	12084 6390	4.8 5.7	578 364							
014	GUER	276615	INOIANA MINNESOTA	1 1	1 2	7230 10225	4.7 4.6	343 468	1 1	5 1	9650 10780	415 527	1	8840	387
		288955	INOIANA	1	2	9930	4.4	435	1	11	9550	416	2	9576	425
		311783	INOIANA	1	3	5563	4.3	241	1	2	6873	328	1	8121	388
016	HOL.	742676	NEW JERSEY INOIANA	1 22	1 71	14610 12370	3.6 3.8	531 472	7	5	12849	480	3	11664	410
018	JER.	382000	INOIANA	3	4	7627	5.4	405	2	2	6480	362			
		388255	INOIANA KENTUCKY	4 1	4 4	6963 6395	4.8 5.9	347 375							
		431208	INOIANA	4	14	8107	5.2	419							
075	HOL.	865323	VERMONT MASSACHUSETTS CONNECTICUT NEW YORK NEW JERSEY PENNSYLVANIA OHIO INOIANA ILLINOIS MICHIGAN WISCONSIN MINNESOTA IOWA MISSOURI NEBRASKA KANSAS MARYLAND VIRGINIA NORTH CAROLINA GEORGIA FLORIDA KENTUCKY OKLAHOMA TEXAS COLORADO WASHINGTON	3 7 5 161 22 34 47 66 16 87 99 55 10 17 7 21 4 16 73 21 4 4 4 3 2 1 2	3 8 6 191 28 46 58 89 30 118 158 100 16 26 8 22 4 17 97 23 97 10924 4 4 4 2 1 3	14230 10172 13896 12109 12100 11711 12109 12655 12099 12662 11704 11994 12836 12485 12207 11591 13798 12697 10952 10924 12253 13075 14473 15250 13560 11375	3.8 4.0 3.8 3.8 3.8 3.8 3.7 3.8 3.8 3.9 3.8 3.6 3.8 3.7 3.8 3.9 4.0 3.8 3.8 3.8 3.9 3.5 3.6 3.7 4.4	539 399 532 459 453 448 452 477 448 485 447 458 486 462 456 446 546 482 411 414 503 509 494 551 502 489	3 6 5 142 15 34 43 60 16 86 82 54 10 16 7 7 3 11 69 18 3 4 3 1 1 2	11 18 20 12608 12741 11659 12569 12570 12385 12612 12310 12458 12682 13617 12549 11987 11883 12517 10838 10365 11440 10468 14738 12680 13130 14555	487 473 520 468 449 426 445 467 458 474 464 461 477 508 459 460 523 465 400 403 443 387 522 455 471 529	1 1 1 1 1 1 1 1 2 1 1 2 1 2 1 1 1 1 1 1 1 1 1 1 1 1	13538 12546 12836 12670 12474 12079 12719 12684 12842 13137 12285 11651 11316 11898 12813 11904 11602 12816 10998 9980 10595 9872 15277 13527 13740	501 498 529 467 459 443 454 472 477 496 460 429 441 477 467 437 527 483 405 385 434 381 547 468 518	
		1000390	VERMONT MASSACHUSETTS CONNECTICUT NEW YORK NEW JERSEY PENNSYLVANIA OHIO INOIANA ILLINOIS MICHIGAN WISCONSIN MINNESOTA IOWA MISSOURI NEBRASKA KANSAS MARYLAND VIRGINIA NORTH CAROLINA GEORGIA FLORIDA KENTUCKY OKLAHOMA TEXAS COLORADO	6 1 9 109 7 35 10 39 84 29 166 43 23 13 5 13 2 10 44 10 3 3 1 3 1	6 1 11 133 8 43 10 41 129 34 234 67 38 15 6 14 2 10 50 11 3 3 1 3 1	14647 10970 14491 13420 15148 12351 13334 13464 12612 13046 13106 14276 14134 15187 13864 13559 11700 15716 11403 11504 15753 11920 12503 15110	4.0 4.2 3.8 3.8 3.9 3.8 3.8 3.9 3.8 3.8 3.9 3.8 3.8 4.0 3.7 3.8 4.1 3.7 3.8 3.8 3.6 3.7 3.7 3.9	580 466 541 507 512 462 501 525 479 498 503 540 539 603 503 512 481 583 435 425 568 437 524 466 588	5 1 9 108 7 35 9 38 77 29 154 42 23 13 5 7 2 10 44 10 3 3 1 3 1	40 11860 13478 13195 11989 11632 12652 12478 12600 11948 12769 13301 13250 13318 12306 12149 11785 13704 11093 11680 12563 10810 12190 12877 12570	496 451 510 490 442 430 437 465 461 451 473 486 482 510 446 458 443 515 404 430 465 377 451 461 457	1 1 1 1 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	11699 12241 14577 13450 12052 12609 12309 12713 12813 12714 12882 12099 12271 13543 12364 12468 11511 14168 11520 11200 11565 10056 12088 12524	481 481 539 499 451 466 432 477 469 486 477 474 465 521 450 447 439 424 423 473 375 453 448	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREE	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD			
								NO. DAUS.	RECORDS	MILK LB.	FAT LB.	NO.	RECORDS	MILK LB.	FAT LB.
		WASHINGTON	1	2	12540	4.1	509	1	20	14220	533	1	14039	521	
1005575		MASSACHUSETTS	2	2	12500	3.9	475	2	17	12020	493	1	12159	469	
		CONNECTICUT	1	1	11160	4.5	501	1	3	11200	452	1	12731	467	
		NEW YORK	53	73	13255	3.7	483	48	18	13437	500	1	13159	487	
		NEW JERSEY	11	18	12317	3.6	444	9	27	12578	467	2	12744	470	
		PENNSYLVANIA	3	4	13693	4.0	544	3	22	10477	412	1	10166	403	
		OHIO	5	6	12657	3.5	433	5	11	14018	508	1	14274	512	
		INDIANA	27	32	12610	3.7	455	23	10	12575	466	1	12486	460	
		ILLINOIS	22	31	12431	3.6	440	22	15	12476	450	1	12643	455	
		MICHIGAN	33	54	12782	3.7	469	33	13	12407	470	1	12571	475	
		WISCONSIN	27	30	12872	3.6	456	25	15	13249	488	1	13305	491	
		MINNESOTA	16	20	12634	3.6	446	16	24	13154	498	1	13052	498	
		IOWA	13	18	12878	3.7	475	11	13	12782	482	1	11257	458	
		MISSOURI	49	80	11304	3.5	396	43	13	11157	407	2	11041	402	
		NEBRASKA	19	24	11554	3.6	416	17	8	12228	447	1	12186	449	
		KANSAS	13	19	11735	3.6	418	3	22	12535	437	1	13415	476	
		MARYLAND	1	1	10680	4.1	434	1	48	12810	581	1	11816	560	
		VIRGINIA	5	6	13453	3.5	473	3	42	11555	430	1	12292	458	
		NORTH CAROLINA	29	35	10967	3.5	387	28	23	10843	400	1	10390	392	
		SOUTH CAROLINA	1	1	8390	3.6	300	1	57	8260	288	1	8480	304	
		GEORGIA	6	7	12116	3.5	428	4	22	11588	461	1	11142	435	
		FLORIDA	1	4	10633	3.7	397								
		ALABAMA	1	2	7075	3.9	261	1	4	8890	324	1	9200	349	
		OKLAHOMA	1	1	18320	3.0	546	1	14	15190	556	1	18465	641	
1033032		NEW YORK	2	2	13295	3.8	505	2	5	12620	468	1	13418	523	
		PENNSYLVANIA	7	8	12192	3.7	452	7	9	11233	402	1	12239	451	
		OHIO	5	5	13462	3.6	478	4	11	13895	500	1	14203	504	
		INDIANA	7	7	13910	3.7	509	6	8	13240	479	1	12132	447	
		ILLINOIS	56	76	11883	3.8	449	48	15	12421	453	1	12648	459	
		MICHIGAN	29	35	13070	3.9	501	29	9	12725	478	1	13771	520	
		WISCONSIN	119	158	13450	3.8	512	116	14	13274	498	1	13158	490	
		MINNESOTA	66	90	12407	3.8	468	61	17	13180	480	1	12254	463	
		IOWA	16	25	15055	4.0	597	10	11	13388	504	2	11351	479	
		SOUTH DAKOTA	1	1	13200	3.0	394	1	15	11610	395	1	11739	405	
		KANSAS	1	1	12860	3.7	474	1	44	12950	455	1	15151	555	
		GEORGIA	1	1	11750	3.5	409	1	11	12570	468	1	8295	398	
		KENTUCKY	1	1	11520	3.2	363	1	2	11120	391	1	10540	374	
		TEXAS	1	1	14200	3.4	487	1	3	10960	417	1	10638	438	
1061458		NEW YORK	3	3	16110	3.4	546	3	8	13120	464	1	13748	495	
		OHIO	2	2	11085	3.5	381	2	13	11810	430	1	11674	426	
		INDIANA	2	2	12840	3.7	464	2	15	13010	472	1	12470	458	
		MISSOURI	2	2	13995	3.9	537	2	44	12970	504	1	13042	507	
		NORTH CAROLINA	2	2	12245	3.8	465	2	33	12445	466	1	13271	500	
		GEORGIA	3	3	11070	4.0	435	3	27	11597	446	1	10090	417	
		TEXAS	1	1	15680	4.0	623	1	16	17300	657				
1087974		MAINE	1	3	12933	3.5	458	1	18	10975	411	2	11767	428	
		NEW HAMPSHIRE	1	1	18000	3.9	710	1	22	14030	526				
		VERMONT	3	4	14680	3.7	537	3	30	12057	479	1	13298	502	
		MASSACHUSETTS	3	5	12748	3.7	472	3	19	11293	443	2	11294	440	
		CONNECTICUT	5	5	13658	3.7	512	5	21	14166	522	1	12823	505	
		NEW YORK	119	140	13737	3.7	510	113	20	13038	481	1	13267	490	
		NEW JERSEY	10	12	13881	3.7	514	10	33	12229	453	1	12522	466	
		PENNSYLVANIA	28	35	11843	3.8	446	26	17	11229	416	1	12139	447	
		OHIO	16	19	14179	3.6	512	15	14	12091	443	1	12872	470	
		INDIANA	25	26	14668	3.8	554	21	11	13422	500	1	13308	494	
		ILLINOIS	1	1	15280	3.7	562	1	10	13970	545				
		MICHIGAN	57	66	14013	3.8	521	57	15	12548	467	1	13376	501	
		WISCONSIN	2	2	7055	3.5	249	2	3	11025	436	1	11494	450	
		MINNESOTA	1	1	17360	3.4	591	1	4	14140	520				
		IOWA	7	8	13804	3.7	508	7	20	13093	498	1	11934	481	
		MISSOURI	11	12	16202	3.7	602	10	28	13717	535	1	13452	506	
		NEBRASKA	1	1	17600	3.8	662	1	9	13270	450				
		KANSAS	11	11	14220	3.8	542	9	17	12239	445	1	12065	448	
		MARYLAND	2	3	17158	3.8	642	2	28	13048	478	2	12617	467	
		VIRGINIA	10	10	14581	3.8	546	10	39	13840	519	1	13988	533	
		NORTH CAROLINA	39	39	11715	3.7	426	37	26	10609	399	1	11053	408	
		GEORGIA	5	6	11871	3.5	421	4	57	10673	408	1	10809	419	
		FLORIDA	4	5	16221	3.5	570	4	98	12684	490	1	11553	471	
		KENTUCKY	7	7	12900	3.6	463	7	9	10944	552	1	10206	372	
		OKLAHOMA	2	2	17250	4.1	692	2	14	15565	550	1	18465	641	
		TEXAS	4	4	15255	3.4	518	4	47	12930	475	1	12481	443	
JER.	446754	INDIANA	10	29	6869	5.2	354	8	10	8301	442	2	7562	410	
		MICHIGAN	2	4	7469	5.9	440	1	4	7580	399				
		NORTH CAROLINA	8	19	6305	5.3	330	5	6	7164	354	3	6926	348	
		SOUTH CAROLINA	1	1	4600	5.0	230								
		GEORGIA	14	21	7942	5.3	423	8	17	8250	414	1	7469	377	
		FLORIDA	20	41	7393	5.1	377	11	36	7737	379	2	7416	363	
		TENNESSEE	1	3	7010	5.4	376								
		ALABAMA	1	1	5160	6.1	315	1	18	7470	391				
		UTAH	1	1	10440	5.2	538	1	3	9270	475				

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. OAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
471534	VERMONT	4	7	8018	5.0	400								
	OHIO	1	1	13750	4.6	633								
	MICHIGAN	1	3	10520	4.9	513		1	45	8580	439	1	9167	472
	IOWA	2	2	5515	5.3	289		2	18	8505	490	1	8382	467
	MISSOURI	18	45	8500	5.3	446		6	13	10255	549	1	7527	399
	VIRGINIA	1	1	6680	5.5	370								
	NORTH CAROLINA	9	10	6497	5.3	348		8	32	6999	336	1	7580	365
	GEORGIA	6	7	8535	4.5	376		1	103	8475	393	2	9620	397
	FLORIDA	12	14	7640	5.0	379		4	38	8739	451	1	7823	394
	ALABAMA	2	2	8125	4.6	382		2	7	8210	376			
	MISSISSIPPI	1	1	10530	5.1	534		1	13	8390	428	1	7717	404
475448	INDIANA	2	3	8250	5.0	409								
	MICHIGAN	3	5	8123	5.4	440		1	6	9195	452	2	7172	368
	NORTH CAROLINA	1	3	6437	5.0	323		1	11	7633	320	3	8008	337
	GEORGIA	2	2	8355	5.0	419		1	4	7540	334	1	8731	431
	FLORIDA	5	17	8898	5.0	444		4	49	8242	406	4	8076	401
478650	VERMONT	2	3	8035	5.8	462		1	13	8350	425	1	7815	411
	NEW YORK	2	2	6550	5.9	381		1	35	5900	331	1	6257	359
	OHIO	2	2	7810	4.9	377		1	19	9620	499	1	9025	488
	INDIANA	2	3	7043	6.2	432		1	15	8875	477	2	9205	478
	WISCONSIN	1	2	12525	5.1	638		1	39	8800	469	1	8415	452
	IOWA	8	12	6278	5.6	355		3	10	7773	424	1	7136	394
	MISSOURI	1	2	6160	4.9	302		1	6	7660	389	1	7826	387
	GEORGIA	3	7	8415	5.2	432		3	27	9392	442	2	8348	416
	FLORIDA	5	8	6676	5.1	338		3	31	7595	381	2	7390	368
	MISSISSIPPI	1	1	6500	5.9	383		1	21	7760	385	1	6714	347
480287	VERMONT	8	17	8151	5.1	414		1	103	9810	530	2	8772	449
	MASSACHUSETTS	2	3	8703	5.3	450								
	NEW YORK	2	2	6985	4.8	332		2	36	6400	312	1	7985	389
	OHIO	3	4	8020	5.3	430		3	25	9457	496	1	8469	443
	INDIANA	4	6	8301	4.7	390		2	15	8973	457	2	8291	437
	MICHIGAN	11	18	8505	4.9	422		8	34	8148	424	1	9151	472
	MISSOURI	5	9	8993	5.6	504		5	18	8559	462	2	8065	468
	NORTH CAROLINA	12	19	6756	5.1	345		9	38	7340	387	1	7422	368
	GEORGIA	16	26	6409	4.8	310		4	48	7378	354	1	8297	361
	FLORIDA	22	29	7980	5.0	398		13	110	8340	416	1	8436	423
	ALABAMA	1	1	8150	5.4	439		1	23	7640	378	1	7401	360
	MISSISSIPPI	5	6	7913	5.1	405		5	15	7509	400	1	6666	339
486158	NORTH CAROLINA	1	1	4230	5.0	214								
505549	VERMONT	8	10	9795	5.1	496		5	31	9279	494	1	9040	481
	NEW YORK	5	5	7582	4.8	359		4	18	7898	416	1	8251	437
	INDIANA	6	9	9557	5.1	481		4	11	8278	423	1	8900	454
	MICHIGAN	3	4	7430	4.6	348		3	19	7743	403	1	8553	440
	MISSOURI	3	5	9446	5.3	507		3	11	8017	434	2	9391	513
	KANSAS	2	2	7510	5.0	374						1	7412	385
	NORTH CAROLINA	11	12	7397	5.0	370		10	29	7610	396	1	7928	395
	GEORGIA	2	2	8560	4.9	419		2	21	8330	393	1	7445	368
	FLORIDA	1	1	6050	4.4	266		1	52	7750	382	1	7118	355
	ALABAMA	1	2	8445	4.6	386		1	18	5550	282	1	8349	402
	TEXAS	1	1	9820	4.6	456		1	14	7130	336			
	COLORADO	1	1	8140	5.1	412		1	8	7970	394	1	8044	413

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY			HERO			
									NO. OAS.	RECORDS NO.	MILK LB.	AV. FAT LB.	RECORDS NO.	MILK LB.	AV. FAT LB.	RECORDS NO.	MILK LB.	AV. FAT LB.	
001	GUER	278954	ILLINOIS	1	1	11380	4.9	558											
		318218	ILLINOIS	28	56	8281	4.9	404	14	8	9774	459	2	9528	444				
			MINNESOTA	1	1	8410	4.9	412											
			ARKANSAS	1	1	6900	5.6	384											
		323083	ILLINOIS	52	123	8966	4.7	424	47	8	9197	438	2	9226	440				
			WISCONSIN	1	1	9460	4.5	421	1	8	9060	445	1	9647	464				
			MINNESOTA	1	1	8820	5.0	440	1	23	8940	446							
		324930	ILLINOIS	1	1	7010	4.6	323	1	8	9550	461	1	8982	427				
		349653	INDIANA	1	3	7087	5.1	366	1	9	8820	447	2	8611	446				
			ILLINOIS	86	212	8694	4.6	398	66	6	9460	444	2	9439	440				
			WISCONSIN	3	7	6030	5.0	297											
			MINNESOTA	1	1	9130	4.8	433											
		350370	ILLINOIS	96	243	8101	4.9	395	64	6	9214	424	2	9037	420				
			WISCONSIN	4	11	7125	5.0	348	3	4	6885	336	1	6126	291				
			MINNESOTA	4	4	8163	5.0	409	3	14	9983	472							
			OKLAHOMA	1	1	9640	5.0	478											
		357515	ILLINOIS	40	79	8366	4.5	375	26	5	9143	430	2	8973	419				
			MICHIGAN	1	1	8390	4.5	377	1	4	9070	443	1	8807	428				
			IOWA	1	3	9360	4.0	374	1	7	11090	480	1	9494	441				
		362470	ILLINOIS	13	26	7804	5.1	404	11	5	9382	448	2	8663	412				
		375812	ILLINOIS	43	91	9225	4.7	430	36	7	9886	449	2	9256	426				
			ARKANSAS	1	1	15350	4.7	715											
		403636	ILLINOIS	3	3	8843	5.4	478	3	10	11007	487	1	9881	459				
		423426	ILLINOIS	4	4	9770	4.6	442	4	9	10515	433	1	10295	437				
		430238	INDIANA	1	1	9090	4.4	404	1	9	9290	450							
			ILLINOIS	51	91	8306	4.5	377	45	8	9766	443	1	9344	426				
		439592	ILLINOIS	18	19	8311	4.7	390	17	12	10492	451	1	10123	438				
		445419	ILLINOIS	16	19	9063	4.7	426	16	11	9497	414	1	9935	435				
		446687	ILLINOIS	106	239	9210	4.9	452	102	9	9630	440	2	9270	430				
			MINNESOTA	1	3	9957	4.4	437	1	5	7595	382	2	6796	328				
			NEBRASKA	2	6	9142	5.0	446	2	17	9710	475	4	9194	446				
			UTAH	1	1	8540	4.8	407	1	21	8990	430							
		457441	ILLINOIS	11	22	7412	5.0	367	11	7	9682	471	2	9175	433				
475930	ILLINOIS	12	20	9136	4.5	414	8	10	11232	479	1	9588	431						
482383	ILLINOIS	8	13	8101	4.9	392	7	10	9619	440	1	9022	416						
491462	ILLINOIS	16	17	7810	5.2	402	10	14	9623	435	1	10351	479						
495864	ILLINOIS	4	4	8570	4.6	390	3	7	10237	451	1	9865	460						
509491	ILLINOIS	2	2	7080	4.3	302	1	2	11780	466	1	9216	383						
510322	ILLINOIS	11	14	9798	4.4	430	9	11	9774	445	1	9625	453						
519636	ILLINOIS	5	5	8164	5.2	422	4	10	9255	448	1	9946	477						
522345	ILLINOIS	1	1	5540	5.8	320	1	10	8010	387									
523595	ILLINOIS	1	1	8170	4.3	353	1	6	8300	373									
HOL.		672622	NEW YORK	1	1	16780	3.6	596											
			ILLINOIS	5	16	11033	3.6	399											
		715471	ILLINOIS	24	74	11839	3.5	417	1	4	12789	470	3	13581	520				
			WISCONSIN	4	15	10555	3.8	402	1	7	10868	421	1	11663	461				
		722342	CONNECTICUT	1	3	13317	3.5	469	1	1	12085	435	1	10878	365				
			NEW YORK	3	11	12612	3.7	467											
			ILLINOIS	16	59	12271	3.6	438	6	8	12298	446	2	12017	441				
			MICHIGAN	2	3	11183	3.7	411	1	24	12600	446	1	10747	384				
			WISCONSIN	3	5	10603	3.4	354					1	10475	387				
			TEXAS	1	2	14420	3.1	444											
		743481	OHIO	1	2	12120	3.0	363											
			INDIANA	1	4	11690	3.6	419											
			ILLINOIS	54	146	12204	3.6	437	3	10	12288	441	3	12025	424				
			WISCONSIN	9	20	12375	3.4	417	1	10	14260	495							

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY RECORDS NO.	AV. MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
			MARYLAND	1	3	16030	3.3	533							
			WEST VIRGINIA	1	6	14995	3.4	509							
			GEORGIA	1	3	12707	4.1	516							
			TENNESSEE	1	1	10540	4.3	455							
			OKLAHOMA	1	3	8317	3.3	285							
		765379	CONNECTICUT	1	1	12950	3.7	480							
			NEW YORK	1	1	10060	3.6	385							
			ILLINOIS	61	169	11660	3.7	436	2	5	13181	515	2	13119	513
			WISCONSIN	4	9	12629	3.5	441	1	16	13943	481	1	11532	428
			TENNESSEE	1	3	8460	4.3	362							
		792389	INDIANA	1	3	14060	3.5	485							
			ILLINOIS	166	402	11460	3.6	411	23	7	11964	438	2	11904	437
			WISCONSIN	8	23	10661	3.6	384	2	9	13413	472	1	12345	441
			IOWA	1	5	10128	3.5	349							
			VIRGINIA	1	9	8229	3.2	264							
			KENTUCKY	4	12	12023	3.4	407	1	10	12676	454	2	12721	465
			TEXAS	1	3	8737	3.6	317							
		808860	NEW YORK	1	2	7430	3.6	265							
			PENNSYLVANIA	3	3	11413	3.6	424							
			OHIO	1	3	13717	3.4	475	1	1	8940	388	1	12197	505
			INDIANA	2	2	13430	4.0	537	1	9	14300	564	1	12938	511
			ILLINOIS	858	2145	12096	3.6	440	422	9	12564	464	2	12259	452
			MICHIGAN	3	9	11207	3.4	384	3	14	12380	421	2	11142	396
			WISCONSIN	20	49	12396	3.6	440	8	13	12360	452	2	11649	417
			KANSAS	1	4	15143	3.2	487							
			MARYLAND	1	2	5955	4.0	238							
			VIRGINIA	2	9	9166	3.6	330							
			WEST VIRGINIA	2	7	10248	4.2	431	1	4	11400	403	3	12408	473
			NORTH CAROLINA	2	7	9728	3.4	329	2	11	11544	389	2	10053	361
			SOUTH CAROLINA	1	4	13513	3.5	469	1	25	12358	429	3	11696	409
			GEORGIA	2	6	10443	3.8	396							
			FLORIDA	1	1	6410	3.6	231	1	92	8140	358	1	6159	262
			KENTUCKY	16	53	10895	3.6	391	9	13	10914	390	2	10468	373
			TENNESSEE	2	5	11684	3.7	426							
			ALABAMA	1	1	7090	3.4	240							
			TEXAS	8	21	12819	3.6	460	1	3	10303	370	1	11968	446
			CALIFORNIA	1	1	14080	3.9	555	1	80	16210	599			
		823710	NEW JERSEY	1	1	12060	3.2	386							
			PENNSYLVANIA	1	1	12350	3.9	487							
			OHIO	1	8	13451	3.4	463	1	13	11683	408	4	9423	352
			INDIANA	1	5	11380	3.6	415	1	2	11270	426	3	12081	452
			ILLINOIS	323	835	11892	3.6	431	174	9	12215	451	2	11986	440
			WISCONSIN	10	46	12073	3.5	420	5	8	12300	452	2	11567	429
			MINNESOTA	1	2	10845	3.2	344							
			SOUTH CAROLINA	1	1	16040	3.0	475	1	34	13110	446			
			GEORGIA	1	2	13145	3.6	477							
			KENTUCKY	5	18	10132	3.8	378	2	24	12683	450	4	12008	432
		828821	NEW YORK	3	12	7344	3.6	263							
			ILLINOIS	258	617	12373	3.9	482	210	10	12524	465	2	12336	456
			WISCONSIN	5	9	11189	3.9	440	5	8	11266	404	1	10328	380
			MINNESOTA	1	2	11950	3.3	390							
			SOUTH CAROLINA	1	2	14055	3.5	488	1	21	13370	464	1	12426	432
			GEORGIA	2	7	14127	3.7	517	1	14	13913	499	4	12650	459
			KENTUCKY	1	3	3733	4.1	151	1	12	6273	225	2	6306	223
			TENNESSEE	4	13	10998	3.7	401							
			ALABAMA	1	2	9390	3.7	339							
			TEXAS	1	2	9645	3.6	346	1	6	11435	420	1	9886	380
		829607	NEW HAMPSHIRE	2	5	13377	3.8	508							
			NEW YORK	1	5	8780	3.4	299							
			PENNSYLVANIA	1	1	13770	3.7	512							
			OHIO	4	8	11748	3.6	417	1	5	11886	393	2	10917	381
			INDIANA	7	23	11789	3.9	463	4	4	12588	447	3	13247	487
			ILLINOIS	838	2186	11582	3.8	432	497	11	12545	467	2	12214	454
			WISCONSIN	23	50	11641	3.6	422	12	10	12541	461	2	11909	439
			MINNESOTA	1	1	9250	4.0	368							
			IOWA	1	1	12150	3.7	455							
			MISSOURI	1	2	9680	3.4	332	1	9	12270	454	1	10965	423
			KANSAS	1	5	13374	3.8	499							
			MARYLAND	1	1	9890	3.1	311							
			VIRGINIA	1	3	11480	3.1	352							
			SOUTH CAROLINA	1	4	11833	3.4	404	1	21	12803	433	2	12426	432
			GEORGIA	1	1	11170	3.6	398							
			KENTUCKY	9	31	9064	3.7	329	7	10	11543	412	2	10519	379
			TENNESSEE	2	2	11470	3.2	367							
			ALABAMA	3	7	8943	3.3	292	1	1	11060	325			
			TEXAS	1	3	9887	3.6	354							
			IDAH0	1	3	11440	3.8	439							

TABLE 16.--DAUGHTER-AVERAGE OF SIREs IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD NO.	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	305-DAY RECORDS				CONTEMPORARY				YEARLY HERD			
					NO.	LBS.	TEST.	FAT LBS.	NO.	RECORDS	MILK LBS.	AV. FAT LBS.	RECORDS	MILK LBS.	AV. FAT LBS.	
838880		ILLINOIS	92	206	11124	3.6	404	7	9	12336	459	1	12004	465		
		WISCONSIN	6	23	11907	3.7	435	2	8	12104	440	1	12862	477		
		MINNESOTA	1	1	10320	3.4	348									
		MISSOURI	1	1	10390	3.9	402									
852063		NEW YORK	1	3	11397	3.6	416									
		INDIANA	1	2	10890	3.4	360	1	2	10715	399	1	14148	498		
		ILLINOIS	267	594	12588	3.7	462	206	10	12535	463	2	12161	447		
		WISCONSIN	11	17	12067	3.7	450	10	10	11017	406	1	11723	434		
		GEORGIA	2	7	14045	3.7	518	2	11	11140	394	2	10906	394		
		KENTUCKY	6	14	11621	3.6	418	5	19	12021	427	2	10262	356		
		TENNESSEE	2	7	9733	3.5	339									
		CALIFORNIA	1	1	14730	3.8	557	1	88	14740	529					
856259		OHIO	1	8	15228	3.6	555	1	6	14494	528	4	13838	507		
		INDIANA	1	1	13520	3.1	424									
		ILLINOIS	312	800	12529	3.5	442	190	9	12493	461	2	12167	446		
		WISCONSIN	3	10	13353	3.8	509	2	6	13163	488	2	12813	475		
		MINNESOTA	2	2	12370	3.5	428	1	5	12960	427	1	12579	428		
		MISSOURI	1	4	10528	3.0	318	1	12	10928	381	4	10178	369		
		WEST VIRGINIA	7	22	13660	3.6	478	1	40	11950	422	1	11554	414		
		NORTH CAROLINA	1	2	9400	3.1	290									
		KENTUCKY	4	7	13910	3.4	482	2	13	10255	364	2	6306	223		
		TENNESSEE	1	3	8970	3.6	326									
		TEXAS	1	1	11880	3.2	381	1	13	10480	362	1	9854	346		
		UTAH	1	5	11462	3.6	413	1	14	13270	460	2	12666	454		
897452		CONNECTICUT	1	2	10240	4.0	410	1	21	11865	441	2	12922	478		
		INDIANA	1	1	14170	4.4	623	1	12	14990	538					
		ILLINOIS	214	247	12099	3.8	453	201	19	12434	470	1	12408	470		
		WISCONSIN	3	3	12143	3.7	439	3	15	15243	567	1	14032	521		
		MISSOURI	1	1	11890	4.3	512	1	3	10570	428					
		WEST VIRGINIA	1	1	12710	3.9	496	1	57	11940	419					
		GEORGIA	1	1	14530	3.6	519	1	18	11430	422	1	15434	538		
		FLORIDA	1	1	10390	3.4	349	1	25	11860	392	1	10181	351		
		ARIZONA	1	1	18890	3.7	697	1	22	15110	532	1	15075	529		
904864		ILLINOIS	29	60	12011	4.0	481	24	8	12507	452	2	12206	443		
		WISCONSIN	1	1	5840	4.0	234	1	2	8400	300					
		GEORGIA	1	4	13633	3.7	504	1	10	13645	485	2	11751	447		
		IDAHO	1	1	12010	3.4	407	1	1	13250	374	1	12775	440		
911488		NEW YORK	4	11	11544	3.6	408	1	4	6650	236	1	8448	298		
		ILLINOIS	412	852	11538	3.8	435	356	15	12397	460	2	12109	449		
		MICHIGAN	1	5	9536	4.0	375	1	8	13586	494	3	12811	461		
		WISCONSIN	5	7	12399	3.5	436	5	12	12940	479	1	13007	472		
		WEST VIRGINIA	3	12	10894	4.0	435	1	57	11990	421					
		GEORGIA	1	1	5030	3.6	181	1	5	9160	324					
		KENTUCKY	1	1	10570	3.4	362									
923749		MASSACHUSETTS	1	1	9210	4.0	373	1	6	9010	309	1	9221	330		
		NEW YORK	2	13	8757	3.9	343					2	9865	356		
		PENNSYLVANIA	1	1	13190	3.6	478	1	2	11510	438					
		OHIO	4	15	13324	3.7	488	2	9	11175	407	4	10801	391		
		INDIANA	3	4	10605	3.7	396	1	9	10545	370	1	10529	368		
		ILLINOIS	1983	4009	12668	3.9	493	1712	13	12829	480	2	12593	473		
		MICHIGAN	3	10	11724	3.9	455	3	9	11553	417	3	11898	423		
		WISCONSIN	35	69	11938	3.9	465	32	10	11666	425	2	11950	437		
		MISSOURI	3	5	11622	4.1	475	3	4	10900	431	1	11728	389		
		NEBRASKA	1	2	13065	3.8	497	1	8	17260	614	2	14960	534		
		VIRGINIA	1	2	7700	3.6	276									
		WEST VIRGINIA	5	6	10748	4.0	428	5	42	12291	436	2	11750	417		
		NORTH CAROLINA	2	4	11815	3.7	427	2	35	11688	421	2	13712	425		
		SOUTH CAROLINA	2	2	11120	3.9	425	2	76	10240	392	1	9712	378		
		GEORGIA	5	9	10948	3.8	416	2	21	9173	385	2	8958	391		
		FLORIDA	1	2	9905	3.4	331	1	109	7255	314	1	6562	277		
		KENTUCKY	11	30	11507	3.8	428	11	15	11317	415	2	11061	377		
		TENNESSEE	3	9	10629	3.8	400									
		ALABAMA	4	6	9340	3.8	344	3	73	8973	338	1	9316	349		
		LOUISIANA	1	1	12940	3.8	495	1	43	12180	439	1	13156	477		
		TEXAS	9	15	11336	3.8	435	5	11	13165	451	1	10536	366		
		WYOMING	1	1	13120	3.8	495									
		923750		NEW YORK	1	1	13290	3.3	444							
PENNSYLVANIA	2			2	11320	4.0	452	2	10	12255	460	1	11630	440		
OHIO	1			7	16756	3.4	565	1	2	11040	386	5	11401	404		
INDIANA	2			6	11647	4.0	463	1	4	12885	482	3	13978	558		
ILLINOIS	702			1474	12026	3.7	446	578	13	12523	470	2	12151	452		
MICHIGAN	2			3	8635	3.1	267	2	12	10268	367	1	11674	427		
WISCONSIN	16			33	12377	3.6	442	14	12	12356	448	1	11887	435		
MINNESOTA	2			11	12944	3.7	481	1	8	11650	422	1	12203	426		
WEST VIRGINIA	3			6	13251	3.6	509	1	35	11610	419					
NORTH CAROLINA	1			3	13930	3.7	510	1	16	11937	432	3	11721	417		
SOUTH CAROLINA	1			1	10720	3.8	403	1	55	9180	355					
GEORGIA	1			2	6140	3.9	239									

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECDRDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECDRDS NO.	MILK LB.	AV. FAT LB.
		FLORIDA	1	1	6450	3.4	216	1	92	8140	358	1	6159	262
		KENTUCKY	3	7	11570	4.0	460	3	10	12453	459	3	10962	403
		TENNESSEE	2	3	9008	4.3	389							
		ALABAMA	3	5	13436	3.1	417	3	36	10384	374	1	10093	383
		TEXAS	2	2	12685	3.8	481	2	12	12660	470	1	10268	376
		DREGON	1	3	11977	3.7	450	1	11	13217	459	3	13720	474
942654	ILLINDIS		1	1	11580	3.8	437					1	13145	474
949041	INDIANA		2	5	12339	3.5	428	1	2	12643	472	3	13909	489
	ILLINOIS		385	836	11888	3.6	427	242	14	12260	455	2	11887	440
	MICHIGAN		1	1	14490	3.7	538	1	110	16370	590	1	14889	524
	WISCONSIN		9	14	11280	3.5	397	6	6	10781	376	1	11972	435
	IOWA		2	3	9748	3.6	347							
	MISSOURI		1	2	14280	3.8	539	1	22	14795	551	2	15418	580
	VIRGINIA		1	2	13655	3.9	538	1	18	12145	515	2	12879	505
	KENTUCKY		6	17	8833	3.5	309	4	21	8534	311	2	8250	300
	TEXAS		4	7	12173	3.6	439	1	19	13520	489			
964278	ILLINOIS		70	70	13268	3.7	486	70	13	12707	481	1	12418	470
	MARYLAND		3	17	10514	3.6	378							
979087	NEW YDRK		1	1	17750	3.5	617	1	21	15290	559	1	17287	629
	ILLINOIS		241	341	12132	3.9	466	221	18	12505	469	1	12350	463
	WISCONSIN		4	4	12270	3.6	444	4	10	13118	474	1	14225	528
	IOWA		1	2	12325	3.2	382							
	WEST VIRGINIA		1	4	10290	4.0	408							
988944	ILLINDIS		28	59	10680	3.6	402	15	9	12827	471	1	12256	442
	WISCONSIN		1	1	11420	3.9	441	1	17	12520	448			
	IOWA		2	2	5755	3.5	204							
	TEXAS		1	1	10250	4.6	471							
1020385	ILLINDIS		41	63	11797	3.6	425	38	9	12791	471	1	12333	455
1026178	INOIANA		1	1	17950	3.7	669							
	ILLINOIS		307	471	11990	4.0	473	284	16	12466	470	1	12323	462
	WISCONSIN		3	3	11707	3.8	437	3	14	12170	452	1	11696	436
	KANSAS		1	1	10510	3.7	386							
	MARYLAND		1	1	5940	3.5	205	1	16	9040	346	1	11194	433
	WEST VIRGINIA		2	2	12710	3.9	491	2	35	12220	415	1	11946	419
	GEORGIA		1	4	11013	4.0	439	1	111	10450	385	3	10224	381
	KENTUCKY		3	4	9050	3.7	333	2	11	11355	417	1	10388	367
	TENNESSEE		1	4	14030	3.8	533							
	TEXAS		1	1	15410	3.7	564	1	7	14800	555	1	10181	364
1026410	NEW YORK		1	1	11810	3.6	423							
	ILLINOIS		432	796	11609	3.8	433	415	12	12460	465	2	12173	451
	WISCONSIN		6	9	13348	3.9	509	6	10	14143	518	1	11501	421
	FLORIDA		1	1	9970	3.5	344	1	105	7920	356	1	6159	262
	KENTUCKY		4	5	8986	3.6	321	3	36	11048	418	1	10686	395
	TENNESSEE		1	3	11440	3.6	416							
	ALABAMA		2	4	12835	3.9	486	1	86	10120	402	1	9875	375
	UTAH		1	3	10733	4.1	440	1	18	11010	400	2	10998	401
1026806	NEW YORK		2	3	11833	3.6	424	1	13	9865	361	2	9919	359
	ILLINOIS		441	816	11968	3.6	430	394	12	12657	472	2	12302	456
	MICHIGAN		1	1	7740	3.6	276	1	7	8070	283			
	WISCONSIN		7	10	11631	3.6	418	6	16	12787	489	1	11896	443
	IOWA		1	1	11320	3.3	377	1	1	12690	590			
	GEORGIA		1	1	16170	3.4	551	1	21	11070	490			
	FLORIDA		1	1	6500	3.5	228	1	92	8140	358			
	KENTUCKY		3	4	10625	3.6	380	3	11	10222	382	2	10827	396
	TENNESSEE		1	2	11520	3.9	445							
	MISSISSIPPI		1	1	13620	3.8	511	1	6	14790	613	1	11042	439
	TEXAS		1	1	12600	3.4	431	1	1	19480	555	1	13669	464
1082308	INDIANA		2	4	11870	3.9	463	2	6	13447	462	2	9554	336
	ILLINDIS		516	937	11196	3.9	430	498	15	12689	475	2	12263	456
	WISCONSIN		10	13	11314	3.9	438	10	14	12499	452	1	12471	451
	MINNESOTA		1	2	9200	4.3	385	1	28	12660	456	2	12563	451
	MISSOURI		1	3	11710	4.1	474	1	16	10797	424	3	11420	448
	VIRGINIA		1	1	10300	3.9	401	1	10	12590	434			
	WEST VIRGINIA		2	4	10250	4.0	406							
	NORTH CAROLINA		1	1	11310	3.7	419	1	25	12240	445	1	12851	459
	GEDRGIA		2	2	6780	4.2	232	2	6	7060	272	1	10006	370
	KENTUCKY		6	9	8878	3.9	346	6	29	11303	428	1	10796	402
	ALABAMA		2	3	8668	3.7	516	1	8	7470	274	1	9330	342
	TEXAS		1	3	8307	3.6	299	1	5	13417	479	1	9886	380
1082891	NEW YORK		7	9	14639	3.7	547	7	20	14744	543	1	14267	526
	NEW JERSEY		3	5	12992	4.1	522	3	11	13047	479	2	12835	496
	PENNSYLVANIA		1049	1916	12098	3.9	470	1040	16	11912	446	2	12247	461
	MARYLAND		2	5	11240	4.0	440	2	8	11824	448	3	9865	411

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD		
								NO.	RECORDS	MILK LB.	FAT LB.	NO.	RECORDS	MILK LB.
1085879	INDIANA		1	2	9275	3.8	352	1	3	12270	410	2	11048	377
	ILLINOIS		337	620	11234	3.8	427	324	13	12465	468	2	12150	455
	MICHIGAN		1	4	14700	3.7	545	1	8	12323	423	3	12855	434
	WISCONSIN		7	10	11312	3.6	404	7	15	11997	431	1	12005	433
	IOWA		1	6	10053	3.7	375	1	19	8342	368	6	8878	395
	WEST VIRGINIA		5	7	11116	3.3	367	4	20	12671	444	1	11848	418
	GEORGIA		1	1	11700	4.1	479	1	1	9000	329			
	FLORIDA		1	1	6220	3.7	229	1	170	7150	323			
	KENTUCKY		1	1	12890	4.0	516	1	13	12620	466	1	12906	458
	TEXAS		1	1	9940	3.8	377	1	33	8080	290	1	8306	303
	UTAH		1	2	11330	3.3	374	1	27	13600	483			
1090340	NEW YORK		2	2	13145	3.9	511	2	21	11440	414	1	9729	356
	INDIANA		2	2	12775	3.5	430	2	2	12655	444	1	11609	419
	ILLINOIS		691	1083	13772	3.7	513	653	14	12623	477	2	12605	471
	WISCONSIN		3	4	13940	3.9	545	2	12	12760	467			
	IOWA		1	5	14414	3.2	460	1	5	9775	375	5	9592	372
	MISSOURI		1	1	16510	4.3	715	1	28	13100	535	1	13625	543
	WEST VIRGINIA		2	2	13545	3.5	460	2	29	10700	396			
	GEORGIA		1	2	10230	3.6	359	1	9	8420	294	1	6213	220
	KENTUCKY		1	3	11840	3.8	445	1	21	12830	452	3	10580	368
1122159	NEW YORK		1	1	13940	3.6	505	1	20	11880	476	1	13080	543
	INDIANA		1	1	11170	4.1	453	1	12	15840	603	1	14726	571
	ILLINOIS		965	1133	12732	3.7	467	894	16	12800	487	1	12901	489
	MICHIGAN		1	1	7760	4.0	308	1	9	8140	218			
	WISCONSIN		10	13	10797	3.8	402	10	16	12059	453	1	13147	491
	MINNESOTA		2	2	13760	3.3	444	2	24	11960	415	1	12481	436
	IOWA		1	1	10320	3.5	361							
	VIRGINIA		1	2	15950	3.3	526	1	7	12330	437	1	11816	428
	WEST VIRGINIA		2	2	11185	3.7	410	1	26	12480	447			
	NORTH CAROLINA		3	3	11020	3.4	369	3	35	10740	374	1	11143	390
	SOUTH CAROLINA		2	2	9170	4.2	386	2	35	10660	390	1	10377	386
	GEORGIA		4	4	8740	3.4	305	4	11	6818	268	1	10715	392
	FLORIDA		1	1	10990	3.7	404	1	62	7860	327	1	6562	277
	KENTUCKY		4	5	10085	3.5	354	4	22	10063	387	1	10780	412
	ALABAMA		3	3	11457	3.6	418	3	30	11777	423	1	12041	435
	WYOMING		1	1	11230	3.8	428	1	7	12600	483	1	12066	441
	COLORADO		1	2	21470	3.1	653	1	43	15285	537	2	14557	500
1131008	INDIANA		1	5	14544	3.8	549	1	3	13322	456	4	14620	514
	ILLINOIS		125	195	12151	3.7	447	117	15	13062	490	1	12559	464
	WISCONSIN		5	6	10383	3.9	402	5	7	11767	421	1	12701	452
	WEST VIRGINIA		1	3	11610	3.5	418							
	NORTH CAROLINA		1	1	9520	3.6	343	1	35	10130	346	1	10431	361
	GEORGIA		1	2	10640	3.5	374	1	17	11645	489			
	KENTUCKY		1	1	7810	3.6	280	1	16	8760	318			
1146113	NEW YORK		1	1	11410	3.6	431	1	20	11650	423	1	9309	335
	INDIANA		1	3	6170	4.3	268	1	3	8770	330	1	10726	397
	ILLINOIS		270	409	12395	3.9	478	260	19	12658	475	1	12279	459
	WISCONSIN		4	6	13718	3.7	508	3	7	13591	493	2	10860	390
	IOWA		1	1	6720	3.6	239	1	3	16270	517	1	12775	433
	GEORGIA		1	5	14662	3.9	573	1	19	14290	513	4	13472	481
	KENTUCKY		1	1	10530	4.0	421	1	45	10530	411	1	10780	412
	TENNESSEE		1	1	11630	4.1	473							
	ALABAMA		1	2	11260	3.0	335	1	2	10820	309			
1152351	INDIANA		5	9	11897	3.8	441	5	5	11390	456	1	8856	349
	ILLINOIS		737	1150	12477	3.8	478	696	14	12739	477	1	12548	469
	MICHIGAN		3	8	13453	3.6	476	3	11	12368	452	2	12942	464
	WISCONSIN		12	19	12250	3.7	453	12	11	12113	451	1	12273	449
	IOWA		1	2	14230	4.0	570	1	32	12260	447			
	MISSOURI		1	1	13880	3.4	470	1	2	13820	506			
	MARYLAND		1	1	8000	3.2	257	1	5	10010	391	1	9178	332
	VIRGINIA		1	2	16125	3.9	621	1	24	14475	562	2	14034	543
	WEST VIRGINIA		2	3	10493	3.6	378	2	7	13350	449	1	11946	419
	NORTH CAROLINA		1	2	8915	4.0	356	1	14	9795	341	2	10262	358
	FLORIDA		1	1	12050	3.5	421	1	120	9110	399	1	8655	355
	KENTUCKY		4	4	9550	4.0	385	4	38	10578	412	1	10780	412
	TEXAS		1	1	11210	3.8	425	1	1	9420	359			
1153054	ILLINOIS		143	219	13156	3.7	486	137	16	12893	481	1	12751	475
	WISCONSIN		1	1	21510	3.4	727	1	16	16370	590	1	14116	530
	SOUTH CAROLINA		1	1	11520	3.9	452	1	77	10250	392	1	9712	378
	GEORGIA		1	1	15130	3.5	527	1	21	11640	501			
1182696	INDIANA		1	1	11610	3.5	402	1	1	8760	311	1	9069	339
	ILLINOIS		199	260	13444	3.8	511	186	18	12715	482	1	12745	480
	WISCONSIN		3	3	15667	3.5	538	3	10	13767	504	1	12579	468
	WEST VIRGINIA		1	1	11790	3.3	388	1	35	11790	420			
	NORTH CAROLINA		1	1	10150	4.0	406	1	54	12720	449	1	13178	471
	GEORGIA		1	1	17260	3.6	627	1	56	15480	570	1	14780	535
	TEXAS		1	2	13695	3.5	470	1	12	12795	461	1	12600	483

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	AV. RECORDS NO.	YEARLY HERD MILK LB.	AV. FAT LB.
	1183498	ILLINOIS	8	8	10025	3.6	366	5	3	9758	355	1	12306	466
	1203114	OHIO	1	1	13590	3.4	461	1	1	13590	461			
		INDIANA	1	1	10040	3.7	373							
		ILLINOIS	211	296	13037	3.7	483	201	18	12666	480	1	12465	470
		WISCONSIN	3	3	13777	3.5	478	3	15	13047	492	2	12361	463
		IOWA	2	2	14980	3.6	530	2	12	13430	487	1	15772	578
		WEST VIRGINIA	3	3	11550	3.6	407	3	31	12030	429			
	1215995	ILLINOIS	191	259	12645	3.9	489	174	16	12438	472	1	12437	470
		WISCONSIN	1	2	15915	3.5	557	1	11	13005	499	2	13511	517
		IOWA	1	2	19420	3.0	587	1	5	15670	515	1	12775	433
		ALABAMA	1	1	11230	3.5	392							
	1232009	ILLINOIS	64	74	11762	4.0	465	59	21	12663	478	1	12910	484
	1237594	INDIANA	1	1	7890	3.9	307	1	17	8740	320	1	8578	304
		ILLINOIS	472	563	12589	3.8	474	451	17	12786	483	1	12761	482
		MICHIGAN	1	1	9360	3.8	353	1	8	7910	273			
		WISCONSIN	5	5	13294	3.7	483	4	13	12910	486	1	13225	474
		NORTH CAROLINA	2	2	13145	3.7	478	2	47	12310	442	1	12710	454
		GEORGIA	1	2	8430	3.7	309	1	19	8420	291	2	7854	272
		KENTUCKY	2	2	8990	4.1	363	2	44	10600	414	1	10780	412
		ALABAMA	1	1	8380	2.9	242							
	1248277	ILLINOIS	42	56	13134	3.7	477	42	17	12563	479	1	12181	463
		NEBRASKA	1	1	13470	3.7	498	1	17	11660	424	1	10933	383
		NORTH CAROLINA	1	1	9420	3.1	288	1	35	10130	347	1	10431	361
	1261381	ILLINOIS	75	78	12923	3.8	494	75	21	12614	478	1	12887	484
		IOWA	1	1	15510	3.8	593	1	6	12390	456	1	11968	461
		NORTH CAROLINA	1	1	6510	3.8	244	1	48	12470	448	1	12851	459
	1261382	ILLINOIS	54	60	12705	3.8	478	52	26	12474	473	1	12691	479
		IOWA	1	1	14550	4.5	655	1	19	13060	497	1	13919	534
	1283111	ILLINOIS	6	6	13875	3.7	511	6	9	13458	503	1	11652	452
	1288851	ILLINOIS	63	64	11398	3.9	446	56	13	12695	483	1	12553	478
		MISSOURI	1	1	8290	4.2	351	1	3	11770	482			
	1293580	ILLINOIS	1	1	8910	3.6	321	1	1	10120	474	1	11772	443
	1298442	ILLINOIS	2	2	9430	4.7	445	2	6	12005	465			
JER.	435245	ILLINOIS	4	15	9086	5.3	481	1	8	7562	388	5	7981	420
	484663	ILLINOIS	1	3	8487	5.8	490							
	500874	ILLINOIS	2	2	7960	4.7	374	1	15	8380	406	1	8197	419
	504888	ILLINOIS	7	9	8024	5.1	408	6	19	8290	429	1	8277	433
	512775	ILLINOIS	9	16	7330	5.2	373	8	6	7633	389	2	7843	400
	517843	ILLINOIS	8	13	8270	5.3	431	5	18	8478	427	2	8371	428
	536836	MISSISSIPPI	3	5	6677	5.0	333	3	34	6133	280	1	5872	270
		LOUISIANA	6	7	6264	5.4	334	6	13	7908	390	2	6388	297
	541601	ILLINOIS	17	23	7708	5.1	388	15	17	7961	407	1	8103	420
	541603	ILLINOIS	24	29	7883	5.0	396	18	11	8442	426	1	8828	454
		IOWA	1	1	8250	5.2	429							
B. S.	51258	ILLINOIS	41	95	10663	4.1	430	26	7	11440	464	2	10469	428
		WISCONSIN	1	3	13440	3.7	497	1	2	10250	431			
		IOWA	3	9	8701	4.2	363	2	5	12560	514	2	10824	431
		MISSOURI	1	4	11023	4.0	438	1	2	9253	389	3	8847	370
		OKLAHOMA	1	1	8130	3.9	313	1	2	7400	298	1	10769	436
		COLORADO	1	4	12320	3.9	479							
	60138	ILLINOIS	23	65	10415	4.2	434	14	7	11118	460	3	10618	437
		WISCONSIN	1	1	12600	4.2	533	1	7	11280	471			
		MISSOURI	3	12	8767	4.3	373					1	8284	334
		KENTUCKY	1	1	13650	3.8	515	1	8	13340	528	1	11859	462
		IDAHO	1	4	9258	4.0	364	1	5	9853	405	1	10497	438
	61560	MASSACHUSETTS	1	2	14840	4.5	675					2	12971	564
		NEW JERSEY	1	1	16530	3.9	642							
		ILLINOIS	105	205	11068	4.4	479	86	8	11635	482	2	11304	465
		WISCONSIN	5	8	12333	4.5	546	2	5	12585	508	1	11946	498
		MINNESOTA	1	5	9062	4.3	387	1	4	12042	492	3	12386	495
		IOWA	6	11	9206	4.6	419	2	69	7673	317	2	6407	354
		MISSOURI	3	4	10650	4.2	444	2	15	11320	452	2	8342	434

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREEO	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		NORTH DAKOTA	2	4	8685	4.3	367							
		SOUTH DAKOTA	9	23	9757	4.5	438	1	14	8445	354			
		KANSAS	1	1	7250	4.0	293							
		OKLAHOMA	1	1	6510	4.3	279							
66318		OHIO	1	1	12310	4.3	530	1	6	11750	485	1	7968	331
		INDIANA	1	4	13190	4.4	572							
		ILLINOIS	199	408	11012	4.2	454	145	7	11430	471	2	11037	452
		WISCONSIN	7	16	9524	4.2	393	5	12	10741	431	1	11366	456
		IOWA	3	6	11686	4.1	476	3	14	10773	428	1	10962	439
		KANSAS	1	2	11195	4.6	514							
		SOUTH CAROLINA	1	1	12010	3.9	472							
		FLORIDA	2	3	8653	4.0	341	1	20	10590	412	1	11565	440
69939		ILLINOIS	27	61	11760	4.0	465	25	6	11549	473	2	11105	459
		WISCONSIN	1	3	9693	4.1	400	1	15	10277	417			
		NEBRASKA	1	7	11040	4.3	471	1	12	8614	362	6	8364	347
		FLORIDA	1	1	8610	4.3	367							
84963		NEW YORK	1	2	11240	4.3	479							
		ILLINOIS	50	90	10649	4.1	441	42	8	11443	468	2	11287	461
		WISCONSIN	3	4	10732	4.5	482	2	10	10660	443	1	10093	402
		IOWA	1	2	8190	3.9	316	1	7	10740	420	1	10737	423
		LOUISIANA	1	2	5930	4.3	251							
85003		OHIO	1	1	9390	4.3	400							
		ILLINOIS	169	296	11238	4.2	470	124	7	11694	485	2	11270	463
		MICHIGAN	1	1	10330	3.8	394							
		WISCONSIN	7	15	11133	4.2	458	7	11	10914	435	1	10539	418
		IOWA	4	15	9761	4.1	397	4	31	10366	415	2	9157	392
		MISSOURI	1	1	12480	4.0	503							
		SOUTH CAROLINA	1	1	12850	3.8	492	1	20	10550	411	1	11565	440
		MISSISSIPPI	1	3	10203	3.8	382							
		OKLAHOMA	1	1	9320	4.2	387							
		TEXAS	1	1	2030	3.8	78	1	2	2620	91			
87630		MASSACHUSETTS	2	3	16215	4.5	729	1	12	12980	556	2	11527	502
		NEW YORK	2	3	11410	4.3	491	1	9	10100	451	1	11532	479
		NEW JERSEY	2	2	12035	4.3	514							
		OHIO	1	1	11750	4.2	492	1	16	10780	450	1	9788	419
		ILLINOIS	200	351	11340	4.1	464	157	7	11650	486	2	11274	464
		WISCONSIN	2	3	10180	4.3	434	2	12	9668	404	1	9145	374
		IOWA	4	10	9717	4.2	403	2	24	10636	444	4	8219	347
		NORTH DAKOTA	2	6	8067	4.1	329	2	16	8087	336	2	8475	322
		FLORIDA	2	3	9543	4.3	403							
		LOUISIANA	3	9	10110	4.0	400							
		OKLAHOMA	2	2	9220	4.2	385							
		OREGON	1	2	9105	4.5	411	1	21	11175	463	1	10595	450
102187		NEW YORK	1	1	9510	4.4	414	1	30	12550	532	1	11707	500
		INDIANA	1	3	7240	4.4	310	1	10	12430	476	2	11860	437
		ILLINOIS	152	245	10349	4.4	458	126	8	11590	466	1	10936	450
		MICHIGAN	1	3	10053	3.7	376							
		WISCONSIN	2	3	9265	4.4	400							
		IOWA	6	13	10120	4.3	431	6	10	11278	444	1	10853	434
		NORTH DAKOTA	1	2	7270	4.3	308	1	8	10520	418	1	8775	354
		FLORIDA	3	3	8787	4.2	367							
102954		PENNSYLVANIA	1	1	8310	4.0	329	1	11	7640	302	1	8088	318
		OHIO	1	1	7090	4.5	321	1	13	11040	463	1	9668	387
		ILLINOIS	28	37	12550	4.2	527	24	10	11555	488	1	10858	447
		IOWA	1	1	16430	4.0	653							
		TEXAS	1	1	1900	4.1	78	1	2	2690	91			
109762		ILLINOIS	64	79	10938	4.2	456	51	11	11107	461	1	11184	460
		WISCONSIN	1	2	11970	4.0	477							
		MINNESOTA	1	1	13460	3.9	529	1	4	12700	451	1	12066	417
		IOWA	1	1	9010	4.5	407							
		NORTH DAKOTA	2	2	5745	4.3	248	1	5	12510	520	1	11903	476
		FLORIDA	1	1	12040	4.3	516	1	6	10840	432	1	8785	360
		TEXAS	1	1	6350	4.0	256	1	4	4310	152	1	5864	219
113180		NEW YORK	1	1	13220	4.2	552	1	23	12610	539	1	11707	500
		ILLINOIS	64	101	10785	4.4	477	49	10	11498	474	1	11446	471
		IOWA	1	3	8043	4.5	357	1	21	8450	367	1	5210	219
		FLORIDA	1	1	10540	4.4	461	1	6	11090	441	1	8785	360
		TEXAS	1	1	12240	3.2	395	1	3	2660	122			
		OREGON	2	2	9680	4.5	436	1	22	9510	420	1	9652	422
114123		ILLINOIS	2	2	10200	4.6	462					1	12241	496
120033		PENNSYLVANIA	1	1	7660	4.1	318	1	9	6330	255	1	8088	318
		ILLINOIS	51	58	11956	4.2	500	40	9	11136	469	1	10855	453
		OKLAHOMA	1	1	7770	4.1	321							
		TEXAS	1	1	3430	4.4	152							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV. FAT LB.	YEARLY HERO			AV. FAT LB.
								NO. OAS.	RECORDS NO.	MILK LB.		RECORDS NO.	MILK LB.	FAT LB.	
M.SH	3631	ILLINOIS	1	3	8530	3.9	333	1	17	10297	334	3	8713	320	
	26059	ILLINOIS	1	1	6340	3.6	226								
	28867	ILLINOIS	2	2	6800	4.0	273	1	13	7910	324	1	6289	235	
	31199	ILLINOIS	5	7	8406	3.9	319	2	8	8715	314	2	5777	214	
	40197	ILLINOIS	1	1	4010	3.8	151								
	69965	ILLINOIS	2	3	9728	3.9	376	2	10	8103	297	2	5840	223	
	72716	ILLINOIS	4	8	8383	3.9	325	2	5	7266	264	3	5534	217	
	101321	ILLINOIS	1	1	7870	4.0	318	1	3	9130	349				
		WISCONSIN	1	1	9870	4.2	410	1	15	9850	365	1	10137	397	
	127671	ILLINOIS	5	7	9634	3.9	371	5	4	9048	347	1	8862	336	
		WISCONSIN	2	4	9428	3.8	359	1	6	9430	332	2	8862	320	
	169242	WISCONSIN	1	1	9540	4.0	377	1	2	8240	323	1	10137	397	
	2213443	ILLINOIS	4	4	7385	4.0	292	4	13	10260	384	1	7227	265	
		MICHIGAN	1	1	7400	3.4	249	1	3	8680	293	1	9941	346	
002 GUER	308518	ILLINOIS	16	24	7937	4.7	373	10	5	8660	396	1	8529	386	
	317477	ILLINOIS	14	22	8452	4.9	411	14	8	9737	434	2	9387	419	
		MISSOURI	5	11	8341	4.8	401	3	10	9497	402	3	7732	367	
		KANSAS	1	5	8328	5.0	417								
		MISSISSIPPI	1	1	7470	4.6	344								
	319209	ILLINOIS	11	45	8672	4.7	405	10	8	8477	415	3	8534	416	
		MISSISSIPPI	1	3	7927	4.9	384	1	2	7090	377				
	323554	ILLINOIS	43	72	7919	4.5	360	39	6	9078	417	2	8574	395	
		MISSOURI	1	1	5020	4.1	204	1	2	8270	370	1	7957	358	
	324861	ILLINOIS	29	58	8216	4.6	375	25	6	8729	397	2	8396	391	
		KENTUCKY	1	1	9210	5.1	470	1	20	7830	401	1	8317	424	
	331955	ILLINOIS	2	5	10164	4.6	464	2	5	8163	382	2	8226	391	
	353680	ILLINOIS	8	23	7244	4.9	351	3	4	8523	424	2	7971	366	
		MISSISSIPPI	1	8	9403	4.7	438	1	13	7515	358	2	10933	422	
	363701	ILLINOIS	45	101	8776	4.7	412	33	6	9184	422	2	9030	420	
		WISCONSIN	1	2	5180	5.2	268	1	5	6730	316	2	7756	303	
	371803	ILLINOIS	30	57	8483	5.1	425	28	6	9546	427	2	9082	408	
		IOWA	1	1	8900	5.4	487								
		MISSOURI	6	9	7288	5.2	377	2	10	7068	337	1	7472	352	
		KANSAS	4	14	7094	5.4	385	1	1	8040	429	2	7434	391	
	382589	ILLINOIS	16	45	7498	4.7	347	4	7	9451	430	3	8061	387	
		MINNESOTA	1	2	9030	4.8	451	1	16	8125	415	2	9047	475	
		MISSOURI	4	6	8858	4.4	392								
		ARKANSAS	2	3	8815	4.5	388	1	2	10080	462				
		TEXAS	1	4	8388	4.4	374	1	3	7798	402				
		NEW MEXICO	2	5	10574	5.0	524	1	6	10053	456	2	10519	492	
	390158	ILLINOIS	14	44	7994	4.8	382	8	4	9079	443	3	8145	401	
	400721	MISSOURI	5	16	8637	5.1	446	5	4	9075	384	2	9153	409	
	400723	INDIANA	1	1	8600	5.6	484								
		ILLINOIS	19	37	8139	4.7	384	13	7	8267	389	2	8569	406	
		MISSISSIPPI	1	1	7260	4.8	345	1	3	10740	481				
	411943	ILLINOIS	13	16	7758	4.7	365	13	8	8657	407	1	8644	410	
	416886	ILLINOIS	34	68	8003	4.6	382	34	7	8778	400	2	8887	402	
		ARKANSAS	1	1	7690	4.0	311	1	12	8390	312				
	419513	ILLINOIS	19	29	7562	4.8	363	15	6	8252	378	1	8275	379	
	419514	ILLINOIS	35	67	8835	4.7	412	32	7	9470	434	2	9433	431	
		IOWA	1	2	8005	4.7	372	1	11	8255	405	1	6595	330	
		MISSOURI	2	3	6783	4.8	323	2	7	6975	307	2	7933	358	
		MISSISSIPPI	1	2	6810	4.9	334	1	15	7280	343	2	10933	422	
	438262	ILLINOIS	12	18	7628	4.7	353	11	6	7851	370	2	8131	369	
	444341	ILLINOIS	1	2	2590	4.8	126	1	8	10955	434	1	11336	459	

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				AV. FAT LB.	YEARLY HERO		AV. FAT LB.
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.		RECORDS NO.	MILK LB.	
HOL.	466976	ILLINOIS	6	8	9917	4.6	468	6	12	9573	454	1	9422	450	
	470521	ILLINOIS	14	15	7734	4.8	372	12	7	10183	437	1	9854	439	
	491614	ILLINOIS	7	8	6634	4.8	321	6	7	8184	362	1	8066	354	
	493092	ILLINOIS	1	2	8115	4.9	396	1	7	9665	452	2	8273	398	
	499861	ILLINOIS	8	11	8112	5.1	411	8	9	10078	453	1	9754	464	
	512096	ILLINOIS	1	1	9100	4.6	418	1	8	9790	400	1	10682	449	
	519274	ILLINOIS	1	1	9240	4.9	457	1	5	11500	432	1	10050	386	
	803178	ILLINOIS	48	129	11058	3.5	386	21	6	10975	401	2	11253	410	
	831732	ILLINOIS	194	438	11005	3.7	403	116	9	11592	425	2	11498	421	
	870204	ILLINOIS	18	49	10752	3.5	374	4	7	13524	480	3	12440	445	
	887016	ILLINOIS	12	31	11084	3.3	368	2	8	9038	309	3	9358	357	
	889678	ILLINOIS	85	218	11450	3.7	424	68	9	11305	416	2	11499	424	
	900882	OHIO	1	1	14140	3.1	443	5	4	12203	455	2	11595	430	
		ILLINOIS	14	45	10961	3.5	387								
	928568	ILLINOIS	26	52	11019	3.6	400	8	7	11329	409	2	11144	410	
	929216	INDIANA	1	1	9130	3.7	338	98	15	12289	460	1	12026	447	
		ILLINOIS	108	165	11763	3.7	428								
	939726	ILLINOIS	294	603	11499	3.8	435	247	11	11879	442	2	11704	435	
	953322	ILLINOIS	403	792	11632	3.8	436	351	12	12068	445	2	11835	438	
		MISSOURI	1	1	14430	3.3	476	1	7	12150	429	1	11728	389	
	978712	ILLINOIS	271	527	10802	3.7	400	229	11	11918	440	2	11721	434	
		MISSOURI	1	1	14110	3.5	490	1	7	12200	427	1	11728	389	
	1000568	ILLINOIS	227	473	11259	3.7	418	196	11	11767	436	2	11760	435	
	1019279	ILLINOIS	13	37	10645	3.8	402	11	11	11191	411	2	11796	427	
	1024799	ILLINOIS	40	89	10652	3.8	401	38	12	11466	426	2	11263	419	
	1028520	ILLINOIS	115	148	11888	3.8	444	104	11	12282	460	1	12240	454	
		MISSISSIPPI	1	1	9800	3.8	376	1	47	7530	340				
	1041500	ILLINOIS	99	214	11125	3.8	415	91	9	11792	438	2	11675	435	
	1057953	INDIANA	1	3	13053	3.2	414	1	11	15153	532	3	14472	502	
		ILLINOIS	413	615	12246	3.6	439	377	12	12198	452	1	11987	443	
		MISSOURI	1	1	14560	3.1	445	1	7	12140	433	1	11728	389	
		ARKANSAS	2	2	695	3.5	24	2	8	5270	206				
	1088861	ILLINOIS	44	46	11871	3.6	428	42	16	12485	466	1	12920	476	
	1097148	ILLINOIS	23	45	10591	3.9	413	21	11	11169	415	2	11284	421	
	1108713	ILLINOIS	194	266	11610	3.5	408	177	13	12183	453	1	11638	433	
		WISCONSIN	1	2	10665	3.1	331	1	34	13680	472	1	12099	420	
	1109924	ILLINOIS	110	168	11132	3.8	421	104	11	11750	441	1	11837	440	
	1110999	ILLINOIS	246	419	12423	3.8	466	226	11	12186	452	2	12130	452	
		KANSAS	1	1	11650	3.8	439								
	1127407	ILLINOIS	157	208	11306	3.8	425	141	14	12182	451	1	12114	450	
		ARKANSAS	1	2	1405	3.6	51	1	4	3600	141				
	1130812	ILLINOIS	161	214	11211	3.9	431	147	13	12091	446	1	12005	445	
	1143710	ILLINOIS	10	14	10789	3.7	397	9	12	11730	428	1	11093	393	
	1165846	ILLINOIS	95	115	11202	3.9	434	86	14	12327	457	1	12313	460	
	1167047	ILLINOIS	7	7	11126	3.7	410	6	17	12468	470	1	11765	444	
	1167447	ILLINOIS	28	28	11944	3.7	448	27	8	12732	475	1	12766	477	
	1170465	ILLINOIS	81	104	12608	3.9	490	75	14	11980	446	1	12290	454	
	1174329	ILLINOIS	76	97	12700	3.6	457	66	14	12500	467	1	12209	454	
		OREGON	1	1	15710	3.3	520								

BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	305-DAY TEST LB.			CONTEMPORARY MILK LB.			AV. FAT LB.	YEARLY RECORDS NO.		HERD MILK LB.	AV. FAT LB.
						MILK LB.	TEST PCT.	FAT LB.	NO. RECORDS	MILK LB.	FAT LB.		RECORDS NO.	MILK LB.		
JER.		1228997	ILLINOIS	60	68	11656	3.8	443	58	15	12475	465	1	12596	467	
		1229006	ILLINOIS	46	51	11718	3.8	446	44	18	12466	462	1	12520	462	
		1236923	ILLINOIS	27	32	12222	4.1	497	27	16	12393	452	1	12361	455	
		1257052	ILLINOIS	19	19	13156	3.7	491	19	15	12209	457	1	11957	453	
		1274586	ILLINOIS	2	2	13450	3.9	521	2	9	13895	547	1	12350	462	
		404632	ILLINOIS	8	34	7489	5.4	401	4	4	7728	415	2	7916	416	
		418760	ILLINOIS	28	64	6988	5.1	357	7	5	7240	389	2	7867	417	
		428873	ILLINOIS	23	58	7502	5.1	383	12	6	8118	421	3	7826	412	
		445454	ILLINOIS	4	13	7102	5.2	358	1	7	6876	382	4	7470	410	
		449383	ILLINOIS	6	17	6904	5.2	351	1	6	6448	327	1	6268	319	
		449615	ILLINOIS	21	53	8843	4.9	432	15	11	7989	418	2	8067	413	
		449616	TEXAS	3	7	7135	4.8	344								
		453722	ILLINOIS	42	92	7931	4.9	390	17	6	7806	405	2	7596	397	
		454510	ILLINOIS	8	21	6452	5.1	320	5	6	7520	400	2	7450	386	
		457681	ILLINOIS MISSOURI	24 16	43 38	7880 8073	5.0 5.3	390 426	9 2	12 4	8510 7490	441 374	2 2	8407 8194	439 409	
		464307	ILLINOIS MISSOURI LOUISIANA	17 19 1	24 33 2	7660 7812 3180	4.8 4.9 4.7	365 379 149	8 4 1	9 4 33	8456 7958 5130	431 419 253	1 2 1	7400 8381 4752	376 436 244	
		464308	ILLINOIS MINNESOTA MISSOURI	2 2 19	3 5 37	9113 9669 8276	4.9 4.8 5.1	442 458 415		2 5	8013 7446	449 364	2 3	6257 7482	342 464 368	
		468450	ILLINOIS	16	31	7197	5.2	378	7	4	7785	404	2	7853	408	
		471787	ILLINOIS	3	11	7903	5.7	447								
		479985	ILLINOIS	5	14	7091	5.4	376	4	6	7822	412	2	6797	361	
		487621	ILLINOIS	10	32	7038	5.5	383	6	6	7715	394	3	7827	402	
		488378	MISSOURI	3	8	7857	5.4	425								
		501287	ILLINOIS	70	98	7359	5.4	391	51	11	7823	405	1	7963	413	
		514629	ILLINOIS	19	26	7214	5.4	396	12	9	8638	437	1	8109	415	
		516472	ILLINOIS	8	22	8207	5.2	425	6	6	8096	413	3	7523	389	
	516473	ILLINOIS	22	45	6653	5.0	330	11	4	7360	384	2	7819	404		
	516474	ILLINOIS ALABAMA	4 1	6 1	8155 8230	5.3 5.1	429 423	2	5	8960	458	2	8671	469		
	519937	ILLINOIS	19	27	7015	5.3	366	15	11	7996	415	1	7834	410		
	536839	ILLINOIS	29	46	8034	5.2	410	22	7	8074	411	1	8338	422		
	540967	ILLINOIS	65	75	7659	5.3	404	56	11	8063	418	1	8299	429		
	544984	ILLINOIS	23	25	7988	5.5	422	17	13	7495	387	1	8449	438		
	569723	ILLINOIS	4	5	6913	5.4	370	4	8	8145	414	1	8287	429		
	570643	ILLINOIS	4	4	8318	5.0	418	4	18	7505	413	1	9244	488		
B. S.	72823	ILLINOIS	10	30	11112	4.0	447	8	5	10993	461	3	10118	425		
	72949	MASSACHUSETTS ILLINOIS KANSAS	1 28 2	2 44 3	7610 8971 5463	4.7 4.2 4.2	365 372 228	1 18	24 7	8445 10460	362 425	2 1	9287 10016	401 404		
	73502	ILLINOIS	1	1	7570	4.2	320									
	74637	ILLINOIS WISCONSIN MISSOURI KANSAS FLORIDA	19 1 1 2 1	35 2 1 4 1	10899 8485 4140 6439 12180	4.1 4.4 4.7 4.6 3.9	450 367 194 294 474	16	8	11042	442	2	10875	442		

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAUS.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	YEARLY RECORDS NO.	MILK LB.	FAT LB.
	85338	ILLINOIS MISSDURI	1 1	2 2	9175 7850	4.2 4.5	386 354	1	10	10425	382	2	11015	411
	110355	ILLINOIS MISSOURI GEORGIA FLORIDA OKLAHOMA	20 2 1 1 1	25 2 1 1 2	12394 10225 13290 11470 8260	4.0 3.9 3.4 3.6 4.3	497 403 452 408 352	16 1	15 6	11280 11320	455 409	1 1	10988 12982	444 517
	116055	MASSACHUSETTS PENNSYLVANIA OHIO ILLINDIS WISCONSIN IOWA FLDRIOA OKLAHDMA TEXAS IDAHD	1 2 1 94 1 1 1 1 3 1	1 2 1 121 1 1 1 1 3 1	9120 6290 11390 10644 8220 7260 11680 4870 7270 8970	4.4 4.0 4.4 4.2 4.2 4.0 3.9 4.0 3.6 4.5	399 255 502 447 345 288 455 193 261 403	1 2 70 1	29 4 10 3	9350 8090 11622 11170	395 334 486 449	1 1 1 1	9276 6813 11608 6224 10355	401 269 479 229 459
	121440	PENNSYLVANIA ILLINOIS	2 14	2 17	5280 10761	4.4 4.3	229 460	1 11	8 12	6760 11530	270 479	1 1	8088 10995	318 456
M. SH	20305	ILLINOIS	1	1	8380	3.7	311	1	7	8460	322	1	8938	352
	28624	ILLINOIS	4	4	10603	3.8	411	1	1	8840	408	1	9102	336
	46431	ILLINDIS IDWA	5 1	9 1	7175 7180	3.8 4.0	280 284	2 1	5 6	8468 9190	328 385	2 1	6701 8698	251 355
	81882	ILLINOIS	1	1	7950	3.9	311							
	100308	ILLINDIS	3	5	8693	4.2	365	3	8	9028	355	1	7161	289
	167651	ILLINOIS	1	1	11880	3.8	454							
003 AYR.	83165	PENNSYLVANIA DHID INDIANA ILLINOIS WISCONSIN MINNESOTA KANSAS	1 1 5 4 1 1 1	2 2 10 6 3 1 1	9760 8415 9135 7202 8357 7680 6360	4.1 4.1 3.9 3.9 4.0 3.6 4.5	396 340 358 282 335 275 284	1 1 4 2 1 1 1	10 5 10 11 11 13	11880 9420 9033 9612 7887 9590	460 368 348 398 301 400	2 2 2 2 2 1	11800 8927 10500 9741 8846 9614	450 362 418 387 352 407
	86779	NEW YORK NEW JERSEY PENNSYLVANIA DHIO INDIANA ILLINOIS MICHIGAN WISCONSIN MINNESOTA IOWA KANSAS DELAWARE MARYLAND WEST VIRGINIA TENNESSEE COLDRAAD	5 1 18 5 16 14 3 23 10 4 1 1 2 1 1 1	7 2 27 7 25 22 4 39 16 4 2 1 2 1 1 1	9427 7575 7970 8861 9742 7483 9137 7611 7033 7006 10460 8850 8625 6780 5940 8440	3.9 5.1 4.1 3.9 4.0 4.3 4.1 4.0 4.2 4.1 4.4 3.8 3.5 4.1 4.4 4.1	368 381 321 347 385 317 374 309 292 284 455 334 297 281 260 346	5 16 2 15 10 3 18 10 4 1 2 2	11 9 8 6 13 11 10 10 6 14	10031 9288 11303 10048 9019 9772 8437 8630 9223 7600 9100	392 386 403 406 357 402 333 353 347 309 351	2 1 2 1 2 1 1 2 1	10860 9318 11753 10135 10143 9997 8921 8094 8862 9483 9151	433 377 434 407 403 398 351 335 331 375 358
	89811	WISCONSIN	1	5	10630	4.5	473	1	23	9500	424	5	8696	397
	90323	PENNSYLVANIA DHID INDIANA ILLINOIS MICHIGAN WISCONSIN MINNESOTA	2 1 1 2 1 1 1	3 2 2 3 3 1 1	7558 10045 9755 8650 8650 4930 7220	4.2 3.6 4.2 4.4 3.7 3.6 4.3	314 360 414 378 314 179 307	1 1 1 2 1 1 1	15 6 4 15 9 5	7655 10260 8510 9588 12273 5900 10630	317 390 368 395 439 223 430	2 2 1 2 3 1 1	7865 10606 9330 9827 12648 7041 9385	329 408 370 392 461 263 396
	90327	WISCONSIN	1	2	8545	4.1	350							
	91560	INDIANA	1	2	9830	3.6	351							
	92173	VERMONT PENNSYLVANIA OHIO INDIANA ILLINOIS MICHIGAN WISCONSIN MINNESOTA IOWA KANSAS	1 4 4 6 3 2 4 2 1 1	1 6 6 11 7 2 5 3 2 1	7870 7059 8364 8590 7242 6955 5639 6778 6270 8480	4.1 4.1 3.9 4.2 4.1 4.0 4.0 4.3 4.2 5.4	323 290 322 354 295 274 227 290 264 455	1 3 3 5 2 2 4 2 1	24 9 5 6 13 6 10 9 13	11030 8553 9378 9401 7932 8230 8494 7575 11440	455 351 389 385 332 326 335 297 420	1 2 2 2 2 1 2 2 2	10159 7200 10364 9420 9838 9009 8698 8047 9429	387 293 387 369 396 365 325 297 344

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD		AV. FAT LB.
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	
ILLINOIS		DELAWARE	1	1	7450	4.0	297	1	16	6130	246			
		MARYLAND	1	1	7410	4.6	338	1	8	10670	421	1	9461	383
	95368	VERMONT	2	3	9130	4.1	368	1	21	8840	344	1	8240	331
		MASSACHUSETTS	2	2	8860	4.1	355	2	11	9735	384	1	10508	415
		NEW YORK	5	10	10121	3.8	385	5	15	9459	378	2	10222	410
		NEW JERSEY	2	2	11235	3.9	425							
		PENNSYLVANIA	14	22	7820	4.1	324	13	11	8675	360	1	8996	366
		OHIO	3	3	8297	3.5	290	2	14	13360	475	1	13690	506
		INDIANA	12	14	8355	4.0	336	11	10	9839	396	1	10079	400
		ILLINOIS	7	12	7529	4.1	308	6	13	8989	364	2	9270	367
		MICHIGAN	8	11	7080	4.3	306	7	6	10166	385	1	10660	410
		WISCONSIN	9	19	7972	3.8	303	8	9	9115	355	2	8578	335
		MINNESOTA	4	6	8231	4.1	333	4	11	8881	346	2	8422	330
		IOWA	1	3	7367	3.7	273	1	11	10057	370	3	8727	314
		DELAWARE	2	2	9695	3.9	378	2	14	8895	362	1	9472	370
		MARYLAND	5	7	8909	4.2	369	4	15	9832	408	1	10090	420
		WASHINGTON	1	1	8010	3.6	291	1	6	9470	398	1	8491	351
		CALIFORNIA	1	1	7310	3.8	277							
	96526	VERMONT	1	2	10240	3.8	390	1	5	8860	349	2	9156	371
		NEW YORK	2	3	9353	4.1	384	1	12	8190	324			
		PENNSYLVANIA	5	9	7448	4.2	312	5	8	9112	384	2	9488	386
		OHIO	2	2	9530	3.9	366	2	3	11195	419	1	9647	353
		INDIANA	5	11	9466	4.0	374	5	7	9673	379	2	9701	385
		ILLINOIS	6	9	8478	4.0	325	5	13	8543	346	2	9389	375
		MICHIGAN	3	7	8787	3.9	345	3	7	11419	404	2	11427	422
		WISCONSIN	1	1	6690	3.8	254	1	19	7170	245	1	6900	238
		MINNESOTA	3	7	7265	4.0	287	3	9	8123	316	2	8056	317
		MARYLAND	1	2	10345	3.8	393	1	4	10890	439	1	10333	403
	99037	PENNSYLVANIA	1	1	9120	4.2	387							
		INDIANA	1	2	6765	3.7	249							
		ILLINOIS	3	7	6033	4.1	248					1	7913	302
		IOWA	5	7	7699	4.0	307	5	3	10477	383			
	99217	NEW YORK	1	1	10500	4.0	416							
		PENNSYLVANIA	4	7	8952	4.3	382	4	10	9381	403	2	8528	365
		INDIANA	5	10	7949	3.9	310	5	8	9715	385	2	9838	389
		MICHIGAN	1	3	12637	4.0	513	1	10	11133	400	3	12880	471
		MARYLAND	2	2	7070	3.8	268	2	28	9405	383	1	8917	361
	102855	NEW YORK	1	1	9880	3.8	376	1	8	9130	355	1	11314	443
		PENNSYLVANIA	2	3	8318	3.8	303	2	7	8863	335	1	10028	397
		INDIANA	1	1	7540	3.9	294	1	17	8110	322			
		ILLINOIS	2	2	6390	4.4	283	1	7	10360	393	1	11827	439
		MICHIGAN	1	1	9220	3.8	354	1	6	8960	343	1	7314	289
		WISCONSIN	3	3	6923	4.4	309	3	8	10510	416	1	9952	410
		MINNESOTA	2	3	6498	4.0	252	2	9	8660	354	1	9462	356
		IOWA	1	2	11555	3.6	418	1	10	10395	430	2	9739	402
		MARYLAND	1	1	10530	3.9	415	1	25	10380	419	1	10072	407
	104768	VERMONT	1	1	9720	4.3	417	1	20	9620	382	1	8709	348
		MASSACHUSETTS	1	1	9030	3.9	353	1	5	8110	332			
		CONNECTICUT	2	2	6775	4.1	287	1	141	9510	369	1	8143	321
		NEW YORK	4	4	10433	4.1	421	4	16	9415	363	1	10854	415
		PENNSYLVANIA	1	1	11090	4.1	453	1	5	11060	434	1	10170	403
		OHIO	2	2	8905	4.0	353	2	32	9195	367	1	9875	392
		ILLINOIS	2	2	10340	3.9	400	2	9	9925	350			
		MINNESOTA	1	2	9170	4.2	389	1	21	9810	423	2	5445	423
		IOWA	4	7	12588	3.9	494	4	7	9505	395	2	8473	415
		DELAWARE	4	4	7638	4.0	303	4	16	8838	345	1	9287	361
		WASHINGTON	1	1	10300	4.1	422	1	20	8730	356	1	9091	370
	108670	VERMONT	2	2	7875	4.2	329	2	11	9045	376	1	10066	408
		NEW YORK	2	2	5195	4.4	224	1	19	8540	337	1	9243	373
		PENNSYLVANIA	3	5	7532	4.1	313	3	10	7880	312	1	8261	338
		ILLINOIS	2	2	8010	4.3	339	2	11	8380	354	1	9516	393
		MINNESOTA	5	8	8491	4.2	360	5	12	9656	396	2	8709	376
		DELAWARE	1	1	5730	4.4	253	1	15	7580	308	1	9592	379
		WASHINGTON	1	1	8650	3.8	325	1	20	8820	361	1	9189	373
	110902	NEW YORK	1	2	10385	3.8	390	1	10	9740	403	2	10971	429
		INDIANA	1	1	8760	4.4	383	1	9	8510	321	1	7652	291
		IOWA	1	3	9680	4.2	408	1	26	10310	417	3	7100	407
		DELAWARE	2	2	7880	4.0	309	2	17	8485	335	1	9467	372
GUER	288158	MASSACHUSETTS	1	1	6200	5.0	312	1	38	7700	391	1	7488	364
		NEW JERSEY	1	3	10613	4.9	518							
		PENNSYLVANIA	2	2	6460	4.5	291	1	14	8070	414	1	8284	395
	296007	OHIO	1	1	10690	5.3	569	1	31	10440	495			
		ILLINOIS	1	3	6770	5.4	366	1	3	8177	404	3	8462	410
		WISCONSIN	1	1	6840	4.4	303	1	35	7510	341	1	8513	403
		MISSOURI	1	1	10570	3.9	414	1	10	10190	452	1	10987	491

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREEO	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY NO. RECORDS DAUS.	MILK LB.	FAT LB.	YEARLY HERD RECORDS NO.	MILK LB.	AV. FAT LB.
346065		RHODE ISLAND	1	1	11580	4.2	481	1	8	9890	450		
		PENNSYLVANIA	50	88	7106	4.6	327	47	13	8533	395	2	8601 400
		OHIO	9	12	8045	4.7	372	5	12	9771	427	1	9436 431
		INDIANA	34	60	8110	4.6	376	26	7	8947	427	2	9394 436
		ILLINOIS	16	32	6896	4.7	323	14	10	8758	410	2	8841 407
		MICHIGAN	12	23	8932	4.8	425	10	7	9299	442	2	9760 456
		WISCONSIN	35	71	7293	4.6	334	33	10	8160	387	2	8272 399
		IOWA	1	1	8510	4.3	363						
		DELAWARE	1	1	7690	4.2	322	1	19	7590	370	1	8131 387
		MARYLAND	8	9	6786	4.7	319	8	17	8151	385	1	8053 390
		NORTH CAROLINA	1	3	6630	4.3	285						
		KENTUCKY	1	2	5420	5.2	283	1	13	7420	360		
		ALABAMA	1	3	6800	4.5	310						
		MISSISSIPPI	1	1	6750	4.4	299	1	60	10050	458	1	8393 396
		LOUISIANA	1	4	6655	4.2	277	1	36	7005	323	1	6856 317
		IDAHO	3	5	7551	4.5	340	3	3	8102	397	2	8490 402
		CALIFORNIA	2	2	9560	4.4	411	1	5	10100	490		
354224		VERMONT	2	2	7125	5.2	367						
		CONNECTICUT	1	5	8680	4.4	377	1	7	8178	387	5	8092 378
		NEW YORK	5	7	8198	4.5	367	2	11	9428	426	2	9334 442
		NEW JERSEY	1	1	9170	4.4	403	1	68	10670	533	1	9756 448
		PENNSYLVANIA	134	277	7307	4.7	342	127	15	8637	399	2	8668 405
		OHIO	15	35	7408	4.7	346	9	12	8828	403	3	8414 387
		INDIANA	67	135	8705	4.7	404	56	8	8985	430	2	9203 439
		ILLINOIS	22	59	7955	4.6	363	19	12	8695	412	3	8648 419
		MICHIGAN	10	20	8790	4.7	415	10	6	9961	468	2	9517 457
		WISCONSIN	82	176	7334	4.6	337	79	11	7865	369	2	8228 394
		MINNESOTA	1	1	7850	4.3	334					1	7881 377
		MISSOURI	1	1	5500	6.0	329	1	13	7190	355		
		NEBRASKA	2	3	10080	4.4	436	1	10	9120	462	2	9892 482
		DELAWARE	2	4	5090	4.8	239	2	6	7762	363	2	8175 372
		MARYLAND	15	38	7135	4.7	330	15	12	8595	396	2	8486 397
		KENTUCKY	1	1	5930	4.7	281	1	7	7590	319		
		ALABAMA	1	5	8462	4.5	378						
		LOUISIANA	3	6	5629	4.3	241	2	42	6859	313	1	6856 317
366648		NEW YORK	2	3	4555	4.8	222						
		NEW JERSEY	1	1	8210	4.4	364	1	80	9540	493	1	8829 451
		PENNSYLVANIA	54	96	7993	4.7	377	51	15	8744	413	2	8951 421
		OHIO	2	6	7473	4.7	347	2	8	8873	412	2	9800 442
		INDIANA	11	18	9107	4.8	433	9	5	10077	463	2	10050 466
		ILLINOIS	6	14	7981	4.6	369	4	26	9764	468	1	9759 472
		MICHIGAN	10	27	9198	5.0	463	9	9	10142	505	2	9593 468
		WISCONSIN	9	16	7689	4.5	347	9	11	7936	377	1	7965 375
		DELAWARE	1	1	7210	4.6	332	1	6	7150	344		
		MARYLAND	1	1	7920	3.9	312	1	7	6060	291		
		MISSISSIPPI	3	5	6417	4.4	282	2	22	7488	320	2	6281 273
		ARKANSAS	3	4	5742	3.9	226						
		CALIFORNIA	1	1	7970	5.6	444						
375476		NEW YORK	2	6	6475	4.8	306						
		PENNSYLVANIA	52	108	7182	4.8	345	47	14	8498	390	2	8776 404
		OHIO	4	9	7832	5.1	398	3	7	9326	436	3	9575 447
		INDIANA	20	35	7909	4.7	371	16	9	9517	437	2	9144 427
		ILLINOIS	19	45	7962	4.9	388	13	14	8552	408	2	8594 416
		MICHIGAN	3	10	8592	4.9	418	3	4	10114	502	3	9433 474
		WISCONSIN	25	56	7516	4.8	358	23	11	8178	379	2	8276 389
		MINNESOTA	1	1	6100	4.0	246	1	15	8140	387	1	7837 363
		NEBRASKA	3	6	6912	4.7	328	3	9	8731	423	1	9102 457
		MARYLAND	5	15	7051	5.0	351	4	16	9026	391	3	8900 397
		FLORIDA	1	1	6210	4.9	305	1	105	7960	357	1	6159 262
		ARKANSAS	1	1	7740	4.6	355						
		LOUISIANA	1	2	6410	5.3	341	1	101	7060	325	1	6028 276
		IDAHO	2	2	7225	4.5	325	2	5	9345	469	1	8230 408
392288		PENNSYLVANIA	7	25	8252	5.0	415	7	10	8494	415	2	8499 408
		INDIANA	2	3	7303	5.4	380	2	6	8635	395	1	8323 393
		ILLINOIS	3	6	8507	5.2	442	3	15	9397	433	1	8658 406
		WISCONSIN	2	5	7966	5.2	423	2	14	9721	471	3	9931 487
		IDAHO	1	4	9153	4.6	423	1	15	8943	452	1	8066 391
397627		PENNSYLVANIA	2	3	6813	4.6	322	2	10	7250	341	2	7560 357
		MICHIGAN	1	1	11300	4.5	511	1	16	12670	499		
409032		MAINE	1	2	9890	4.4	433	1	1	10280	477	1	8415 400
		VERMONT	1	1	7230	5.2	372						
		NEW YORK	5	7	8595	4.8	411	3	11	9613	425	1	8301 402
		NEW JERSEY	3	6	8948	4.6	411	1	45	8765	421	2	8955 410
		PENNSYLVANIA	150	326	7756	4.8	370	147	16	8502	394	2	8703 408
		OHIO	17	33	8323	4.9	403	14	16	8463	391	2	8740 398
		INDIANA	82	181	9078	4.7	426	66	9	9292	442	2	9304 439
		ILLINOIS	42	101	8391	4.7	396	35	11	9125	431	2	8899 427
		MICHIGAN	36	81	9331	4.8	446	31	6	9682	459	2	9509 457
		WISCONSIN	93	181	8027	4.7	377	85	12	8281	386	2	8443 399

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LBS.	TEST PCT.	FAT LBS.	305-DAY CONTEMPORARY AV.				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LBS.	FAT LBS.	RECORDS NO.	MILK LBS.	FAT LBS.
		MINNESOTA	1	2	7880	5.1	402	1	11	7150	352	1	6660	335
		IDWA	3	8	7998	5.0	397	3	6	9316	449	2	9203	459
		MISSOURI	1	3	12193	4.5	553	1	48	10010	488	3	8611	427
		NEBRASKA	2	3	9180	4.2	388	1	1	8880	416			
		DELAWARE	2	3	9998	4.2	413	2	8	7798	371	2	7963	367
		MARYLAND	15	34	7794	4.9	383	13	17	8164	396	2	8696	416
		FLORIDA	2	2	6305	4.3	268	2	33	7690	327	1	6824	292
		KENTUCKY	1	1	7930	5.1	407							
		TENNESSEE	2	3	8010	4.7	372	1	3	9320	439	1	9723	427
		ALABAMA	1	2	11235	4.9	549							
		MISSISSIPPI	2	3	6215	4.2	261	1	68	9690	444			
		LOUISIANA	2	4	6442	4.8	305	1	54	6793	311			
		WASHINGTON	1	1	8740	4.6	403					1	8448	399
		OREGON	2	7	9229	4.7	432	2	6	9973	462	3	10094	455
		CALIFORNIA	1	1	9150	4.9	448	1	8	10440	503			
410890		VERMONT	1	1	11530	4.2	490	1	19	8060	371	1	8829	387
		NEW YORK	2	2	9940	4.5	446	1	23	9020	429			
		PENNSYLVANIA	10	17	6729	4.5	303	10	14	7788	359	2	8406	369
		OHIO	2	7	6804	4.4	310	1	8	7463	345	6	7679	352
		INDIANA	10	21	8850	4.5	394	6	8	9450	447	2	9916	473
		ILLINOIS	3	10	8550	4.5	382	3	6	8998	434	3	9003	429
		MICHIGAN	4	9	10260	4.7	481	3	7	9385	464	2	9323	446
		WISCONSIN	8	20	6950	4.5	313	8	8	8260	389	2	8017	381
		DELAWARE	1	1	6510	4.1	267	1	3	8960	437	1	7859	378
		MARYLAND	3	4	6030	4.6	275	3	23	7348	328	1	8435	373
		FLORIDA	1	3	9943	4.6	455	1	41	8567	385	2	7609	316
		LOUISIANA	1	3	5840	4.0	231	1	103	6615	309	2	6442	297
		IDAHO	2	3	8153	4.9	398	2	8	8368	399	2	7669	379
411967		MAINE	1	1	9290	4.5	421	1	20	9340	480	1	9548	470
		NEW YORK	1	1	6700	4.6	305							
		PENNSYLVANIA	32	66	7920	4.8	383	30	18	9043	417	2	9672	451
		OHIO	1	2	4850	5.4	258	1	5	8015	362	2	8192	375
		INDIANA	19	34	8554	4.7	400	15	8	9056	426	2	9096	425
		ILLINOIS	19	35	8164	4.7	386	14	13	9610	448	2	9249	430
		MICHIGAN	3	4	8187	4.8	394	2	5	10115	521	1	8622	379
		WISCONSIN	20	43	7095	4.6	325	20	15	7763	365	2	7952	379
		MARYLAND	3	8	8233	4.9	403	3	9	10277	443	2	10019	444
		VIRGINIA	1	2	7855	5.3	413							
		MISSISSIPPI	2	2	5865	3.8	223	2	25	7470	343			
		LOUISIANA	1	2	6575	4.7	304							
		IDAHO	3	8	9265	4.9	455	2	9	8760	431	4	9212	456
		COLORADO	1	2	7315	5.4	394							
		WASHINGTON	1	3	7667	5.1	391	1	4	9550	407	3	9112	404
		CALIFORNIA	1	1	7410	4.8	352							
419988		VERMONT	1	2	5390	4.6	247	1	16	7780	350	2	8867	393
		MASSACHUSETTS	1	1	5770	4.7	272	1	2	6560	232	1	9984	393
		CONNECTICUT	1	1	7530	5.4	405	1	48	10450	437	1	10769	465
		PENNSYLVANIA	7	11	8021	5.0	401	7	15	9396	406	2	10095	426
		ILLINOIS	1	1	12180	4.4	531	1	13	8190	380			
		MICHIGAN	2	3	9423	4.8	453	2	8	10763	465	1	10611	484
		WISCONSIN	1	2	8560	5.0	422	1	9	8835	432	2	9380	447
422644		PENNSYLVANIA	2	4	8190	5.0	405	2	9	7950	382	2	8157	399
		INDIANA	3	4	6920	5.5	374	3	7	9573	419	2	8075	397
		ILLINOIS	6	10	7935	5.0	395	2	4	8923	435	1	8295	383
		WISCONSIN	5	11	6453	4.8	308	5	12	7382	338	2	8157	372
426820		MAINE	1	1	4180	4.6	193	1	2	7970	327	1	7161	310
		VERMONT	1	1	6790	4.9	335	1	19	8310	379	1	8829	387
		MASSACHUSETTS	2	2	7915	4.5	350	2	5	10790	394	1	10268	385
		CONNECTICUT	2	2	8170	4.9	389	2	12	11570	473	1	12257	490
		NEW YORK	7	10	7397	4.5	332	4	11	7986	361	1	9315	399
		PENNSYLVANIA	87	192	7635	4.6	353	85	13	8482	392	2	8393	392
		OHIO	2	3	7983	4.7	374	1	5	10245	390	1	8916	367
		INDIANA	16	26	8426	4.8	402	14	10	8610	413	1	9271	432
		ILLINOIS	10	17	8060	4.5	358	10	8	9124	431	2	9574	457
		MICHIGAN	13	27	7633	4.6	353	11	8	9068	430	2	9647	454
		WISCONSIN	25	55	7666	4.6	351	25	11	8109	388	2	8247	396
		MINNESOTA	1	1	8560	4.0	341					1	7881	377
		IOWA	1	5	7032	4.8	340	1	5	11523	503	4	10181	433
		NEBRASKA	1	1	8880	4.7	416	1	1	8580	333			
		DELAWARE	1	3	8163	4.5	368	1	5	9925	400	3	8981	386
		MARYLAND	4	7	6805	5.1	342	4	15	8043	380	1	7959	370
		VIRGINIA	1	1	6850	4.7	320							
		ALABAMA	1	1	7650	5.0	380							
		IDAHO	5	10	8317	4.9	409	4	6	9045	424	2	9523	435
		CALIFORNIA	1	1	9460	4.3	406	1	3	7040	412			
430271		ILLINOIS	14	30	7538	4.9	365	12	7	7951	368	2	7497	359
		WISCONSIN	1	1	8320	5.4	451	1	18	7940	359	1	7706	371

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV. RECORDS NO.	YEARLY HERO		
								NO. O.A.U.S.	NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
430273		WISCONSIN	2	2	8025	4.8	380	2	11	8250	371			
433384		MASSACHUSETTS	1	1	12570	4.7	590	1	23	14610	591	1	14966	595
		NEW YORK	2	2	7720	4.5	346							
		NEW JERSEY	1	1	10120	5.4	544							
		PENNSYLVANIA	72	139	7965	4.9	389	70	13	8449	395	2	8705	407
		OHIO	3	4	5880	4.6	268	2	11	6635	303	2	7042	320
		INDIANA	29	79	8931	4.9	437	26	8	9306	450	2	9366	453
		ILLINOIS	9	26	7581	4.9	365	7	12	9171	458	3	8888	422
		MICHIGAN	19	42	8814	5.1	447	16	12	9854	472	2	9920	477
		WISCONSIN	38	69	7346	4.9	359	35	15	8042	373	2	8328	394
		IOWA	6	15	8457	4.8	405	5	6	8880	395	2	8784	436
		DELAWARE	1	1	7540	5.5	414	1	14	8240	358	1	8044	351
		MARYLAND	7	12	7327	4.8	352	7	11	8146	392	1	8824	411
		FLORIDA	1	1	6520	5.0	324	1	170	7150	322			
		ALABAMA	1	1	4300	4.9	210	1	16	5210	244	1	5472	259
		MISSISSIPPI	2	3	6023	4.8	297	2	13	8665	407			
		LOUISIANA	3	6	7139	4.5	322	2	73	6718	310	2	6649	307
		IDAHO	3	5	9137	4.6	416	1	3	9480	457	3	8894	428
		WASHINGTON	1	4	10390	5.7	590	1	69	10650	557	1	11314	570
434678		PENNSYLVANIA	1	1	3710	4.1	151	1	17	8120	373	1	8916	412
		OHIO	1	1	10860	4.5	490							
		ILLINOIS	3	5	8852	4.7	418	3	18	7818	363	1	8578	408
		WISCONSIN	1	3	7647	4.3	330	1	15	7730	371	3	7772	374
437282		PENNSYLVANIA	15	30	7400	4.9	357	15	15	8276	388	2	8352	402
		OHIO	2	3	9225	4.4	401	2	5	9798	432	2	9437	434
		INDIANA	3	3	8297	4.6	386	3	11	8617	411	1	7677	365
		MICHIGAN	2	4	8939	4.2	375	2	7	10325	490	2	9808	468
		WISCONSIN	4	10	6740	4.6	308	4	7	7108	324	2	7753	364
		MARYLAND	2	4	7230	4.9	351	2	13	9225	412	2	9618	432
		CALIFORNIA	1	1	9650	4.2	402							
437283		NEW YORK	1	1	7230	4.4	319							
		PENNSYLVANIA	6	11	8153	4.8	388	6	11	8525	385	2	9276	414
		OHIO	1	1	9830	4.7	460	1	4	11330	470	1	10682	479
		INDIANA	1	2	8220	5.2	426	1	5	9425	472	2	9238	454
		ILLINOIS	1	2	11560	4.4	504	1	9	11375	412	1	11739	416
		MICHIGAN	3	4	9113	4.3	391	3	10	9087	396	1	10808	432
		IOWA	3	4	7513	4.5	337	3	14	8290	369	1	9118	434
439085		PENNSYLVANIA	21	50	7340	4.9	352	21	13	8556	403	2	8805	412
		OHIO	1	2	9720	5.3	509							
		INDIANA	14	28	7907	4.7	372	12	8	8898	419	2	9047	421
		ILLINOIS	5	14	7729	4.6	358	5	10	8521	396	1	7879	377
		MICHIGAN	5	7	7327	4.8	351	3	4	8092	377	1	10588	472
		WISCONSIN	34	77	7844	5.0	386	32	11	9150	432	2	8912	432
		IOWA	1	1	7500	5.3	394	1	12	10720	498	1	9211	450
		NEBRASKA	2	5	10574	5.0	516	1	7	9318	443	4	9151	453
		MARYLAND	4	8	7154	4.7	331	4	16	6068	388	2	7784	365
		MISSISSIPPI	1	1	10190	4.7	479							
		LOUISIANA	2	2	5780	4.8	277	1	14	6490	301	1	7161	348
		IDAHO	1	2	7630	5.5	416	1	3	8400	434	2	7587	387
		WASHINGTON	1	4	9435	5.5	520	1	10	9510	477	2	9767	491
444417		MAINE	1	1	7410	5.6	412	1	4	12970	472	1	10399	398
		VERMONT	1	1	7930	4.1	321	1	24	8290	380	1	8807	395
		CONNECTICUT	2	2	9590	4.5	425	2	10	8210	362	1	9859	422
		PENNSYLVANIA	5	8	7676	4.9	376	5	12	8524	408	2	8921	426
		INDIANA	1	1	10270	4.2	430	1	4	7040	300	1	8044	349
		WISCONSIN	3	4	9717	4.8	469	2	11	10713	467	2	9712	426
		DELAWARE	1	1	8000	4.1	328	1	14	9510	319	1	10529	389
		MARYLAND	1	1	6980	4.5	315	1	5	9840	407	1	9221	400
444418		VERMONT	1	1	7730	5.9	458	1	2	5710	237			
		NEW YORK	1	2	6380	4.6	296							
		NEW JERSEY	1	1	10580	4.7	499							
		PENNSYLVANIA	73	138	7652	4.6	354	70	13	8378	393	2	8467	397
		OHIO	11	23	8623	4.5	384	8	8	9888	447	2	8950	408
		INDIANA	36	64	9361	4.6	426	28	8	9713	458	2	9819	457
		ILLINOIS	11	17	8915	4.5	400	7	7	8936	431	1	8363	409
		MICHIGAN	9	18	8251	4.8	392	9	19	9159	424	2	9796	449
		WISCONSIN	58	113	7993	4.6	362	53	10	8421	390	2	8634	407
		IOWA	1	1	9200	4.3	397					1	8349	412
		DELAWARE	2	4	10125	4.6	455	2	12	9308	432	2	9050	429
		MARYLAND	10	19	7294	4.7	340	10	18	7918	378	2	8473	401
		FLORIDA	1	1	4210	4.8	202	1	107	7580	350	1	6159	262
		MISSISSIPPI	2	2	5195	4.1	213	2	24	7640	338	1	6420	260
		LOUISIANA	3	6	7496	4.3	318	3	73	6888	317	1	6304	290
		IDAHO	1	3	6583	4.7	310	1	1	9033	460	1	7804	362
454223		NEW YORK	1	2	7015	4.8	338							
		PENNSYLVANIA	15	30	7144	5.0	354	14	16	8554	407	2	9044	429
		INDIANA	5	6	7862	5.0	391	4	20	9853	458	1	9323	454

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV. RECORDS	YEARLY HERD			AV. FAT
								NO. DAUS.	NO. RECOROS	MILK LB.	FAT LB.	NO.	RECORDS	MILK LB.	FAT LB.
		ILLINOIS	3	5	6501	5.0	325	3	7	8784	395	2	8878	392	
		MICHIGAN	2	3	9810	5.0	483	2	8	10280	495	1	10426	475	
		WISCONSIN	7	13	7610	4.8	363	6	12	8512	409	2	8740	418	
454224		VERMONT	2	3	8053	4.8	386	2	17	8038	368	2	8824	395	
		NEW YORK	1	3	8163	4.8	397	1	24	8755	410	3	7954	372	
		PENNSYLVANIA	39	82	7035	4.8	336	37	12	8151	374	2	8749	407	
		OHIO	2	5	7587	4.6	339	2	7	8924	400	3	8511	389	
		INDIANA	12	23	8764	4.8	417	10	6	8488	396	2	9247	431	
		ILLINOIS	7	13	8445	4.5	380	6	12	9941	435	1	9699	434	
		MICHIGAN	1	2	8085	4.8	383	1	3	8480	399	1	9058	432	
		WISCONSIN	18	37	7831	4.8	379	17	11	8748	401	2	8421	405	
		IOWA	1	1	10760	5.3	571	1	7	10400	441	1	9581	435	
		MARYLAND	5	9	7207	4.7	338	4	14	9413	412	2	8788	402	
		ALABAMA	1	2	5790	4.6	264								
		LOUISIANA	1	4	5495	4.6	249	1	4	6200	285	4	5216	249	
454483		NEW YORK	1	1	6120	4.6	278	1	12	11020	426	1	8055	389	
		PENNSYLVANIA	22	48	7418	4.5	332	22	16	8526	385	2	8987	400	
		INDIANA	8	8	9109	4.3	396	6	14	8917	413	1	8925	412	
		ILLINOIS	3	5	9291	4.1	383	3	5	8216	393	2	8311	389	
		MICHIGAN	4	7	8164	4.2	340	4	7	9654	425	1	9376	442	
		WISCONSIN	9	11	7480	4.4	333	7	12	7861	376	1	8405	400	
		IOWA	1	1	7280	4.5	325	1	2	6480	310				
		MARYLAND	1	1	7360	4.2	306	1	7	8450	349	1	8611	354	
457544		VERMONT	2	3	6828	4.6	316	2	16	8005	373	2	8949	404	
		NEW YORK	1	1	7450	4.9	365	1	1	7640	368	1	11783	501	
		NEW JERSEY	1	1	6340	4.8	305	1	2	14020	531	1	12906	471	
		PENNSYLVANIA	5	8	7273	4.7	348	5	15	8637	390	2	9246	426	
		MICHIGAN	2	3	3310	4.7	165	2	16	7360	352	1	9232	457	
		IOWA	1	1	6060	5.0	305	1	4	12330	488	1	10420	435	
459489		MAINE	1	1	7700	4.7	361	1	5	10780	393				
		VERMONT	2	2	8850	4.4	384	2	10	7780	385	1	9080	406	
		CONNECTICUT	1	1	7470	4.7	349	1	13	10720	415	1	12154	482	
		NEW YORK	4	6	8678	4.7	405	2	13	8685	363	1	9314	405	
		PENNSYLVANIA	70	144	8064	4.8	391	70	14	8141	373	2	8676	406	
		OHIO	7	12	8272	4.7	389	7	16	9380	426	1	8602	412	
		INDIANA	21	50	9151	4.8	437	16	8	9153	430	3	9363	447	
		ILLINOIS	14	26	8343	4.9	409	13	12	8616	422	2	8827	429	
		MICHIGAN	19	40	9174	4.6	424	18	9	9467	420	2	9555	427	
		WISCONSIN	57	117	8725	4.8	416	50	10	8626	407	2	8652	415	
		MINNESOTA	1	1	9550	5.0	482	1	8	8460	420	1	9341	451	
		DELAWARE	1	2	8195	4.7	383	1	12	11485	454	2	8589	373	
		MARYLAND	6	13	7976	5.1	404	5	15	7776	392	2	7806	391	
		VIRGINIA	1	1	12740	4.6	587	1	3	14820	560	1	13363	495	
		SOUTH CAROLINA	1	3	9810	4.6	455	1	30	7607	337	2	7254	327	
		FLORIDA	1	1	8180	4.3	350	1	113	7250	327	1	6159	262	
		MISSISSIPPI	2	4	8459	4.7	401	2	9	7639	363	3	6834	329	
		LOUISIANA	1	5	6262	4.6	288	1	53	6626	305	2	6442	297	
461752		PENNSYLVANIA	6	13	7476	5.0	371	5	13	8277	396	2	8487	410	
		OHIO	1	3	9117	4.6	420	1	4	9150	423				
		INDIANA	1	1	11510	5.1	586	1	5	12600	649	1	11968	665	
		ILLINOIS	2	3	7145	4.8	335	2	9	8390	408	2	8579	418	
		WISCONSIN	4	7	6720	5.2	347	4	13	8948	425	2	8776	423	
		MARYLAND	1	1	5200	4.4	227	1	29	8970	342	1	9189	336	
		TENNESSEE	1	1	7740	4.4	343	1	14	6840	323				
		MISSISSIPPI	1	1	7510	3.8	288	1	27	7660	333				
461754		PENNSYLVANIA	2	8	8969	4.8	423	2	13	9117	405	4	9278	428	
		MISSISSIPPI	1	1	6700	4.4	295	1	27	7690	333	1	6420	280	
464796		WISCONSIN	2	2	6935	4.2	288	2	11	6385	287	1	7385	335	
		MARYLAND	1	2	6535	5.2	335	1	19	6690	350	2	7238	373	
467102		PENNSYLVANIA	3	5	5053	4.9	246	2	10	10415	424	2	11195	444	
		OHIO	2	2	8265	4.7	387	1	8	9490	359	1	8916	367	
		ILLINOIS	2	3	8218	4.6	372	2	17	10908	460	1	8317	302	
		WISCONSIN	6	13	7180	4.9	351	6	10	8411	412	2	8111	389	
467697		MICHIGAN	1	1	11220	4.6	538	1	26	9130	418				
470947		NEW YORK	2	4	8130	4.7	376	2	7	10865	463	1	9227	445	
		NEW JERSEY	1	2	9305	4.4	403								
		PENNSYLVANIA	12	16	7883	4.9	391	11	15	8940	398	1	9475	417	
		INDIANA	6	14	8066	4.9	388	4	17	9073	434	2	9455	454	
		ILLINOIS	2	3	9180	4.8	443	1	16	7780	367	1	8012	378	
		MICHIGAN	6	8	8406	4.8	400	6	8	9086	402	1	10705	465	
		WISCONSIN	5	10	8423	4.7	389	4	10	8920	414	2	10017	509	
		IOWA	1	5	11860	5.0	590	1	31	9825	458				
		MARYLAND	1	1	6960	4.7	330	1	6	8500	424				
		MISSISSIPPI	1	1	6040	4.6	277	1	14	6920	296	1	6420	280	

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	AV. RECORDS NO.	YEARLY HERD LB.	AV. FAT LB.
	470949	INDIANA	1	1	7340	5.3	387							
		WISCONSIN	1	2	9565	4.8	458	1	25	8805	449	2	8655	452
	473934	VERMONT	3	4	6902	4.5	317	3	17	7835	355	1	8847	396
		NEW YORK	1	3	8237	4.1	336	1	6	8177	381	3	8106	376
		PENNSYLVANIA	9	12	5506	4.6	250	9	12	7931	356	1	8161	372
		ILLINOIS	2	2	8565	4.3	368	1	12	11190	447	1	10933	450
		WISCONSIN	1	1	7750	5.0	387	1	9	9300	433	1	9974	472
		MARYLAND	1	2	6535	4.4	290	1	13	6995	358	2	7843	386
	478142	CONNECTICUT	1	1	7130	5.3	375	1	16	10680	424	1	12328	492
		NEW YORK	1	2	7210	5.3	384	1	1	13140	427	2	12230	434
		PENNSYLVANIA	3	8	7516	5.0	373	3	12	10233	427	2	10883	462
		INDIANA	1	3	9627	4.9	471	1	3	11555	508	2	10650	466
		MICHIGAN	1	1	9540	4.8	454	1	9	12080	483	1	11456	510
		WISCONSIN	1	1	8530	4.4	372	1	9	14030	488	1	11183	415
	481861	VERMONT	1	1	8000	4.6	371	1	12	6950	305	1	8284	362
		CONNECTICUT	1	1	9130	4.0	369	1	24	10150	415	1	11053	456
		PENNSYLVANIA	2	2	7495	4.9	364	2	10	9180	397	1	9222	401
	483409	WISCONSIN	1	1	5510	4.7	257	1	8	11480	403	1	9603	409
	490695	RHODE ISLAND	1	1	12360	4.7	584	1	9	11740	531	1	11936	531
		MICHIGAN	3	4	8905	4.5	400	3	10	10198	458	1	9825	443
	495454	PENNSYLVANIA	6	6	7767	4.8	370	6	22	7988	344	1	9369	403
		WISCONSIN	1	1	7370	5.2	386	1	12	8290	371			
	497766	MASSACHUSETTS	1	1	9360	5.4	510	1	17	9860	504	1	10976	555
		PENNSYLVANIA	3	4	5467	4.6	253	3	19	8982	372	1	9251	383
	501777	PENNSYLVANIA	2	3	7855	4.7	363	2	27	9365	376	2	10075	410
		MICHIGAN	1	2	4620	5.5	254	1	14	7395	343	1	6562	308
	510289	CONNECTICUT	1	1	7950	4.9	388	1	13	10680	412	1	12230	481
		PENNSYLVANIA	2	2	7205	4.6	331	2	11	10085	404	1	10906	420
HDL.	906000	VERMONT	1	2	16085	3.5	560					1	13832	499
		MASSACHUSETTS	10	17	12031	4.0	479	10	14	11847	471	2	11755	464
		RHODE ISLAND	2	4	13840	3.8	525	2	10	15148	562	2	12620	480
		CONNECTICUT	7	9	14039	3.9	545	7	17	14243	540	1	13659	514
		NEW YORK	60	81	12295	3.8	465	47	19	12948	474	1	12911	473
		NEW JERSEY	15	25	10925	3.9	421	9	20	12418	451	1	11253	416
		PENNSYLVANIA	192	386	10957	3.9	420	188	13	11936	448	2	12018	451
		OHIO	33	57	12296	3.7	460	33	8	12521	445	2	13115	470
		INDIANA	42	86	11967	3.9	461	40	8	12831	479	2	12481	466
		ILLINOIS	44	84	11700	3.9	446	43	15	12409	459	2	12213	452
		MICHIGAN	35	57	11770	3.8	446	33	14	11849	444	2	11677	438
		WISCONSIN	102	191	11559	3.8	433	100	12	12200	446	2	12079	440
		MINNESOTA	9	10	12992	3.8	478	9	14	13523	485	1	12980	469
		IOWA	12	20	12803	3.9	504	12	17	12992	474	2	11164	478
		MISSOURI	1	3	11267	4.5	503	1	15	11887	438	2	13423	523
		NEBRASKA	1	1	10110	4.4	444	1	2	12550	515	1	11903	472
		DELAWARE	6	6	12555	3.5	436	6	35	12260	445	1	12293	444
		MARYLAND	28	50	11761	3.8	450	25	15	11745	437	2	11415	426
		VIRGINIA	10	11	13613	3.8	516	8	20	13491	513	1	13735	507
		WEST VIRGINIA	7	12	11329	3.7	419	4	8	12031	475	2	11241	429
		NORTH CAROLINA	1	2	5735	3.7	211	1	5	8365	307	1	8971	335
		TENNESSEE	1	3	7277	4.1	296							
		ALABAMA	2	3	10565	3.5	366	1	58	7910	307	1	8295	317
		TEXAS	1	1	9030	3.6	329	1	54	6530	258	1	7270	284
		UTAH	1	2	11475	4.1	469	1	9	13630	497			
		WASHINGTON	2	3	13618	3.9	528	2	39	13893	495	2	13315	476
		DREGON	2	3	13238	4.2	549	2	13	12473	510	2	11290	460
	919608	MAINE	1	1	12750	3.7	467							
		NEW YORK	20	29	12400	3.6	439	12	21	12995	462	2	14095	500
		NEW JERSEY	7	11	12345	3.8	470	3	15	12262	466	2	12402	472
		PENNSYLVANIA	69	138	12023	3.8	454	69	13	11418	432	2	11766	440
		OHIO	5	8	9973	3.6	361	3	5	10637	390	2	11236	392
		INDIANA	37	70	14074	3.7	517	34	7	12897	474	2	13279	481
		ILLINOIS	36	67	12508	3.8	471	31	13	12559	467	2	12084	452
		MICHIGAN	16	29	12794	3.7	470	16	15	12725	466	2	13072	477
		WISCONSIN	37	77	12110	3.7	444	37	11	11775	430	2	11990	433
		MINNESOTA	1	1	12230	3.3	409	1	5	11490	430	1	13483	477
		IOWA	6	7	12150	3.5	426	4	8	13439	482	1	12818	463
		DELAWARE	7	15	13618	3.5	478	7	13	11881	430	2	13373	474
		MARYLAND	20	28	11094	3.7	406	18	14	10943	402	2	11357	418
		VIRGINIA	2	4	13295	3.7	475	1	14	15890	558	1	16274	590
		WEST VIRGINIA	1	2	9590	3.2	309							
		KENTUCKY	1	1	14090	3.6	507	1	10	12270	462	1	11053	399
		TENNESSEE	1	1	15310	4.0	616							
		ALABAMA	2	4	11054	3.6	384	2	57	9173	344	1	9875	375
		TEXAS	1	4	14450	3.6	519	1	4	13295	489	2	9723	429

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE OREGON	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	AV. FAT LB.
			2	4	10425	4.2	430	2	8	11370	432	1	11751	442
941567	NEW YDRK		1	2	15215	4.0	600	1	25	14620	562	2	14743	553
	PENNSYLVANIA		65	154	11155	3.7	417	65	10	11763	438	2	11644	433
	OHIO		4	10	9410	4.0	363	4	9	12091	426	4	11768	421
	INDIANA		46	120	12094	3.8	452	44	7	13208	492	2	12746	476
	ILLINOIS		37	96	11471	3.9	442	36	11	12023	448	2	12223	451
	MICHIGAN		8	15	11870	3.6	423	7	10	13365	475	2	13892	497
	WISCONSIN		77	165	11228	3.7	415	75	11	11946	429	2	11873	426
	MINNESOTA		1	1	12480	3.0	375	1	4	14250	531	1	12764	455
	NEBRASKA		7	16	11370	4.0	444	5	6	10326	377	2	12865	470
	KANSAS		1	1	9010	3.9	349							
	MARYLAND		7	16	9361	4.0	378	6	16	10247	380	2	10539	407
	VIRGINIA		2	5	12968	4.1	531	1	18	16800	593	3	15867	575
	KENTUCKY		2	2	10645	3.5	368	1	13	13330	464			
	ALABAMA		1	1	9580	3.9	376	1	48	7130	300			
	OKLAHOMA		1	1	10670	3.8	401	1	1	8710	322	1	10911	393
	TEXAS		1	1	15160	3.4	509	1	13	11200	357	1	12677	432
	IDAHO		2	3	11815	3.3	391	2	5	11968	410	1	10519	398
	CALIFORNIA		1	4	11645	3.4	397	1	161	13140	482			
949159	VERMONT		3	4	12080	3.9	470	2	20	12285	487	2	11075	444
	MASSACHUSETTS		4	6	11102	3.6	391	4	10	12388	465	1	12864	475
	CONNECTICUT		6	6	13320	3.5	464	6	16	12615	472	1	13463	508
	NEW YORK		62	73	12112	3.5	415	56	22	12656	465	1	12501	456
	NEW JERSEY		5	5	12758	3.7	473	5	17	12242	450	1	12890	474
	PENNSYLVANIA		72	101	11224	3.5	387	68	15	11637	433	1	12008	448
	OHIO		19	20	11979	3.5	415	16	16	12502	452	1	12468	450
	INDIANA		10	12	13287	3.7	483	9	9	14181	534	1	14017	523
	ILLINOIS		28	34	12728	3.6	453	27	15	12698	482	1	12205	461
	MICHIGAN		26	32	12518	3.4	425	23	17	12035	436	1	12512	454
	WISCONSIN		30	34	12835	3.4	440	28	13	12516	455	1	12685	457
	MINNESOTA		11	11	12835	3.4	434	10	12	12642	462	1	11973	429
	IOWA		6	10	12522	3.5	432	6	11	13196	473	2	12744	497
	MISSOURI		1	1	14940	3.6	543	1	2	15860	596			
	SOUTH DAKOTA		1	1	14860	3.6	536	1	16	11480	415	1	11325	403
	NEBRASKA		1	1	13680	3.3	458	1	17	11650	427	1	10933	383
	DELAWARE		4	5	12509	3.3	408	4	11	12789	475	1	12835	467
	MARYLAND		11	12	9883	3.5	332	11	18	11745	425	1	12136	448
	VIRGINIA		4	4	11413	3.7	422	2	26	11950	430	1	12410	461
	WEST VIRGINIA		1	2	10665	3.6	379	1	15	10590	375	2	10426	372
	GEORGIA		2	3	14383	4.0	576	2	10	12490	461	2	11487	423
	TEXAS		1	1	15220	3.7	557	1	21	14230	531	1	10181	364
	IDAHO		3	4	16955	3.0	502	3	14	14153	501	1	12882	453
	COLORADO		3	6	12777	3.7	464	2	4	13340	490	2	10110	399
	UTAH		2	2	14945	3.8	564	2	6	15220	576			
	WASHINGTON		2	2	14075	3.9	548	2	50	13095	459	1	13794	501
949576	WISCONSIN		1	4	8420	4.1	344	1	5	10725	377	2	10181	372
955493	MAINE		2	2	15325	3.8	565	2	4	14800	577	1	15097	588
	NEW HAMPSHIRE		2	2	11695	3.8	433	2	8	9950	389	1	10137	390
	VERMONT		23	31	11869	4.0	468	15	25	12699	480	1	12867	483
	MASSACHUSETTS		8	9	10364	3.9	404	8	12	11849	454	1	11281	425
	RHODE ISLAND		1	1	13880	3.6	493	1	21	11030	420	1	11761	436
	CONNECTICUT		14	18	13258	3.8	507	12	15	12811	483	1	13507	506
	NEW YORK		234	309	12507	3.7	461	188	19	13184	481	1	13106	475
	NEW JERSEY		35	48	12176	3.8	464	19	20	12952	480	1	12586	467
	PENNSYLVANIA		450	810	11417	3.8	429	441	14	11915	446	2	12198	458
	OHIO		70	100	12158	3.7	453	65	10	12972	465	1	13021	465
	INDIANA		102	195	12320	3.8	462	89	7	13091	482	2	13041	478
	ILLINOIS		138	262	11978	3.8	452	130	14	12480	464	2	12262	453
	MICHIGAN		98	148	12024	3.7	442	95	13	12444	454	1	12714	464
	WISCONSIN		256	454	11836	3.7	440	243	12	12343	447	2	12364	450
	MINNESOTA		47	70	12301	3.8	460	45	12	12433	448	1	12317	452
	IOWA		27	43	12420	3.7	454	24	10	13488	484	2	13165	486
	MISSOURI		2	2	14340	3.9	555	2	47	14255	521	1	15554	594
	NORTH DAKOTA		2	3	11405	4.0	442	2	44	12450	484	1	11990	434
	SOUTH DAKOTA		1	1	9490	2.9	278	1	14	12110	424	1	11739	405
	NEBRASKA		4	10	14485	3.8	535	3	9	11962	440	2	12176	405
	KANSAS		3	3	12820	3.8	481	1	32	13090	506	1	12524	460
	DELAWARE		37	51	11478	3.7	418	34	18	11916	435	1	12138	444
	MARYLAND		53	97	11604	3.8	440	49	15	11884	447	2	12231	460
	VIRGINIA		18	26	12186	3.8	452	12	32	13383	499	1	13693	506
	WEST VIRGINIA		3	5	11003	3.8	415	2	26	11735	424	2	12050	436
	NORTH CAROLINA		4	8	13746	3.4	466	4	20	12256	437	1	12718	465
	GEORGIA		2	2	9765	3.5	332	2	7	11125	411	1	10421	393
	FLORIDA		2	6	11166	3.8	423	2	22	9590	361	2	8723	339
	KENTUCKY		4	7	13953	3.6	489	3	6	11778	441	1	11140	421
	LOUISIANA		1	1	10240	3.9	401	1	10	11850	447			
	TEXAS		2	7	10635	3.7	391	2	18	11382	434	3	9959	392
	IDAHO		4	8	10692	3.8	403	4	10	12542	470	2	11866	436
	COLORADO		2	2	10660	3.9	409	1	26	11070	399	1	10442	377
	UTAH		10	14	11234	3.7	415	10	8	12743	454			
	WASHINGTON		1	1	11290	4.2	470	1	23	11660	446	1	11805	455

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.		
								NO.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		OREGON	4	8	12925	4.1	532	4	7	10484	462	2	11598	480
		CALIFORNIA	1	1	14210	3.6	511							
	969667	NEW HAMPSHIRE	1	1	12220	3.8	460	1	3	12300	510	1	11543	437
		VERMONT	8	12	11775	4.0	461	7	19	12720	455	1	13039	470
		MASSACHUSETTS	10	13	12402	4.0	501	10	14	13195	487	1	13049	497
		CONNECTICUT	6	6	13030	3.7	487	6	16	14365	534	1	14879	554
		NEW YORK	101	136	12988	3.8	488	95	19	13114	475	1	13129	477
		NEW JERSEY	17	24	12587	3.8	482	13	15	12748	473	2	12527	467
		PENNSYLVANIA	220	375	11946	3.9	459	220	12	11713	439	2	12218	456
		OHIO	34	47	12436	3.7	461	31	13	13019	474	1	13270	472
		INDIANA	44	76	13315	3.8	505	39	6	12777	497	2	13254	489
		ILLINOIS	53	86	12661	3.9	485	51	14	12787	477	1	12332	456
		MICHIGAN	48	71	12843	3.8	487	47	17	12555	465	1	13108	484
		WISCONSIN	106	155	11993	3.8	456	101	13	12425	453	1	12155	444
		MINNESOTA	11	17	12910	3.8	492	10	17	13461	488	1	12772	467
		IOWA	9	16	11099	4.0	442	7	9	12956	469	2	13395	491
		MISSOURI	6	8	9525	4.0	377	5	18	12332	453	1	13381	486
		NEBRASKA	2	3	14710	3.6	532	2	21	11995	430	2	12437	443
		DELAWARE	5	8	10191	3.8	386	4	9	11401	399	2	12018	429
		MARYLAND	30	48	11569	3.8	444	29	14	11306	424	1	11741	441
		VIRGINIA	10	13	13285	3.8	505	8	25	14063	518	1	13639	501
		WEST VIRGINIA	3	5	12633	3.7	458	3	19	13025	460	2	13309	483
		NORTH CAROLINA	2	2	11095	4.0	435	2	59	9800	426	1	9276	360
		KENTUCKY	2	3	15690	3.7	575	2	4	13075	479	2	10846	401
		OKLAHOMA	1	1	15810	3.7	582	1	6	11010	412	1	10867	405
		ARIZONA	1	1	10070	3.8	386	1	37	13990	481	1	12949	455
		UTAH	1	1	16710	4.0	667	1	11	15660	583			
		WASHINGTON	2	2	13320	3.7	489	2	29	14015	464	1	14977	416
		OREGON	2	2	9650	3.9	375	2	6	13050	477	1	14868	553
		CALIFORNIA	1	2	17030	3.6	610	1	28	13575	507			
	969669	MAINE	5	6	12012	3.8	446	5	11	11601	455	1	12523	468
		NEW HAMPSHIRE	1	1	12660	4.1	525	1	15	11720	443	1	12284	497
		VERMONT	3	3	12437	3.9	477	3	16	12633	476	1	12241	441
		MASSACHUSETTS	13	18	12918	4.0	510	13	14	13061	497	1	12981	501
		CONNECTICUT	13	15	13696	3.8	515	12	15	13298	503	1	13374	503
		NEW YORK	116	144	12465	3.7	455	112	21	13060	477	1	12996	473
		NEW JERSEY	13	15	13168	3.7	488	10	14	12099	444	1	12540	455
		PENNSYLVANIA	144	212	12177	3.8	460	142	14	11664	440	1	12241	461
		OHIO	25	37	12751	3.7	464	22	10	12347	447	1	12962	465
		INDIANA	43	82	13158	3.8	498	38	7	13373	505	2	13517	501
		ILLINOIS	30	54	12528	3.8	470	29	17	12335	456	2	12031	445
		MICHIGAN	32	43	12280	3.7	448	32	15	12880	472	1	13156	477
		WISCONSIN	87	142	11835	3.7	438	82	12	12087	446	1	12012	441
		MINNESOTA	10	16	13464	3.7	507	10	20	13145	486	2	12263	458
		IOWA	8	13	11948	3.7	441	8	12	13370	485	1	12692	467
		MISSOURI	7	9	12476	4.0	499	7	15	13949	509	1	14137	521
		SOUTH DAKOTA	1	1	9000	4.1	366	1	4	10450	397	1	11434	405
		NEBRASKA	2	2	13210	3.7	491	2	13	13040	474	1	12415	453
		KANSAS	2	2	11585	3.6	419	2	68	12550	477	1	12524	460
		DELAWARE	6	8	10560	4.1	421	6	13	12603	452	1	12880	462
		MARYLAND	17	25	11923	3.9	456	17	19	11511	464	1	12053	462
		VIRGINIA	5	7	14063	3.6	507	4	34	13371	509	1	13662	510
		FLORIDA	2	3	9020	3.8	344	2	39	10613	384	2	9606	370
		KENTUCKY	1	1	10840	3.6	392	1	7	12970	447	1	13789	482
		ALABAMA	1	3	8707	3.1	282							
		IDAHO	1	2	11020	4.2	455	1	5	12945	482	2	9788	414
		COLORADO	2	2	13940	3.7	513	2	31	11720	410	1	10878	391
		ARIZONA	1	1	10400	4.2	440	1	95	12490	438	1	13113	456
		UTAH	4	4	14260	3.5	490	4	9	12228	429			
		CALIFORNIA	1	1	14400	3.3	476	1	96	16940	604			
	975683	MAINE	1	1	11370	3.5	400	1	9	9530	354	1	10976	401
		VERMONT	10	14	12653	3.7	468	10	22	12709	471	1	12597	463
		MASSACHUSETTS	9	13	12223	3.7	454	9	11	12368	463	2	13008	493
		CONNECTICUT	10	11	13106	3.8	493	10	21	13629	513	1	13877	509
		NEW YORK	76	113	11897	3.7	437	69	19	12759	465	1	12978	468
		NEW JERSEY	25	32	11983	3.8	452	18	19	12943	482	1	12454	469
		PENNSYLVANIA	193	359	11441	3.8	433	191	12	11778	441	2	11986	450
		OHIO	33	42	12502	3.6	451	29	10	12670	459	1	12506	443
		INDIANA	38	84	13063	3.7	486	35	7	12849	478	2	12788	473
		ILLINOIS	51	82	11886	3.8	449	49	13	12535	469	2	12409	463
		MICHIGAN	40	61	12051	3.6	439	38	14	12070	446	2	12703	464
		WISCONSIN	64	127	12390	3.6	440	63	14	12392	447	2	12416	448
		MINNESOTA	12	19	11757	3.8	442	12	11	12503	453	2	12931	464
		IOWA	8	14	11850	4.0	472	8	13	11695	433	2	12133	449
		MISSOURI	1	1	11190	3.6	400							
		NEBRASKA	2	7	10846	4.0	430	2	8	12166	431	2	12326	433
		KANSAS	1	5	14264	3.7	521							
		DELAWARE	4	4	11368	3.5	387	4	22	10300	392	1	11154	405
		MARYLAND	30	47	11519	3.8	432	29	16	11425	425	2	11872	443
		VIRGINIA	4	5	11121	3.9	441	2	22	14335	544	1	13740	522
		WEST VIRGINIA	2	5	7910	3.8	292	2	7	11003	413	2	10380	400
		NORTH CAROLINA	1	1	9110	3.9	359	1	12	9990	373			

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		KENTUCKY	2	2	9440	3.3	305	2	8	9915	363	1	11053	399
		TEXAS	2	3	12858	3.7	472	2	14	11695	443	2	11222	449
		WASHINGTON	2	3	13485	3.7	487	2	10	13230	473	2	13037	471
		CALIFORNIA	2	4	14989	3.6	540	2	44	13910	510			
978750		MAINE	1	1	10520	3.7	389	1	3	12780	452			
		VERMONT	17	21	11217	3.6	403	14	25	12196	447	1	12057	442
		MASSACHUSETTS	16	26	11957	3.8	454	16	11	12246	464	2	12246	474
		CONNECTICUT	5	7	11640	3.7	432	5	18	12478	467	1	12096	455
		NEW YORK	137	179	11786	3.7	434	97	20	12670	467	1	12897	472
		NEW JERSEY	32	43	11865	3.8	455	16	21	12519	471	1	12498	473
		PENNSYLVANIA	311	505	10734	3.8	402	303	13	11551	434	2	11981	449
		OHIO	56	87	11740	3.7	432	50	10	12542	453	1	12528	450
		INDIANA	63	124	12833	3.7	473	52	7	12999	480	2	12606	465
		ILLINOIS	84	150	11485	3.7	428	80	15	12538	468	2	12082	451
		MICHIGAN	58	73	12335	3.7	461	55	17	12624	467	1	12777	464
		WISCONSIN	109	178	10952	3.7	405	106	12	11786	425	1	11849	428
		MINNESOTA	32	46	11639	3.7	428	31	15	13027	465	1	13126	473
		IOWA	16	22	11384	3.6	411	16	15	12706	468	1	12951	467
		MISSOURI	4	6	13093	3.7	478	4	17	13223	491	1	13329	509
		NORTH DAKOTA	1	1	12610	3.2	402	1	18	12560	510			
		SOUTH DAKOTA	1	1	11950	3.5	413	1	14	10960	368	1	11183	400
		NEBRASKA	2	3	9275	4.1	366	2	11	9938	405	2	10715	436
		DELAWARE	9	19	11022	3.6	394	9	17	12097	440	2	11992	437
		MARYLAND	43	73	11772	3.7	435	41	18	11753	446	2	12032	460
		VIRGINIA	14	17	12168	3.7	449	7	34	13639	518	1	13637	506
		WEST VIRGINIA	1	1	11100	3.6	397							
		NORTH CAROLINA	3	6	10594	3.6	379	3	12	11948	435	2	10652	408
		GEORGIA	1	1	8950	3.8	344	1	14	11230	427	1	12382	459
		FLORIDA	1	1	10550	3.6	378	1	35	10490	381	1	9221	348
		KENTUCKY	2	4	11058	4.0	443	2	6	13170	462	2	10846	385
		ALABAMA	1	2	10590	3.4	359							
		TEXAS	2	2	12690	3.5	437	2	14	12840	447	1	11543	428
		MONTANA	1	1	10580	4.2	440	1	19	13470	534			
		WYOMING	1	2	10590	3.5	375	1	22	11015	396	1	10519	379
		COLORADO	1	1	9130	4.0	362							
		UTAH	7	11	10908	3.8	414	7	16	11938	438			
997481		MAINE	2	2	11515	3.6	405	2	8	11810	447	1	10764	427
		NEW HAMPSHIRE	2	2	11875	3.9	457	2	15	13370	528	1	13849	568
		VERMONT	3	3	10223	4.0	409	1	8	12760	459			
		MASSACHUSETTS	10	11	12178	3.8	457	9	11	12272	471	1	12408	474
		RHODE ISLAND	1	1	13200	4.1	536	1	9	13020	545	1	12284	535
		CONNECTICUT	5	7	14024	3.6	506	5	20	13690	486	1	13009	487
		NEW YORK	49	62	12164	3.6	439	41	20	12574	452	1	12639	456
		NEW JERSEY	25	33	11265	3.7	415	17	16	12108	441	1	12324	450
		PENNSYLVANIA	151	239	11347	3.7	420	149	11	11527	431	2	11895	445
		OHIO	21	30	11579	3.5	404	18	11	12507	454	1	12536	446
		INDIANA	42	72	12917	3.6	466	37	7	12970	480	2	12900	472
		ILLINOIS	68	112	12739	3.7	466	65	14	12891	478	2	12625	466
		MICHIGAN	36	56	12226	3.6	440	35	14	12294	452	1	12704	462
		WISCONSIN	52	87	11874	3.6	428	50	11	12132	432	2	12016	430
		MINNESOTA	7	10	12891	3.4	439	7	22	12021	423	1	12244	432
		IOWA	4	5	10888	3.6	390	4	22	12843	465	1	11721	500
		MISSOURI	1	2	13245	3.8	504	1	42	13030	470	2	12928	474
		NORTH DAKOTA	1	1	11690	3.7	430	1	32	12960	470	1	11990	434
		NEBRASKA	4	14	12109	3.7	447	4	7	11877	428	3	12275	438
		DELAWARE	5	9	12275	3.5	434	5	19	11373	412	2	11914	432
		MARYLAND	10	15	10665	3.8	401	8	16	11545	428	1	11993	454
		VIRGINIA	4	4	12070	3.6	434	3	26	12317	446	1	10907	444
		WEST VIRGINIA	1	1	10900	3.6	395	1	20	8470	328	1	9516	366
		KENTUCKY	1	1	11550	3.6	411							
		IDAHO	2	6	12164	3.7	450	2	5	12345	462	3	11048	411
		ARIZONA	1	1	13730	3.2	440	1	32	13960	518	1	12720	452
1001512		VERMONT	1	1	12930	4.3	556	1	41	14510	546	1	12927	477
		MASSACHUSETTS	4	6	9410	4.4	418	4	19	10551	431	1	10895	440
		CONNECTICUT	2	2	10940	3.4	369	2	21	13755	507	1	13914	514
		NEW YORK	47	60	11014	3.9	426	39	21	13422	492	1	13178	483
		NEW JERSEY	9	11	11138	3.9	429	6	16	14023	504	1	13309	486
		PENNSYLVANIA	66	107	10439	3.9	403	65	13	12136	457	2	12415	470
		OHIO	14	20	11127	4.0	444	14	11	13056	465	1	12440	443
		INDIANA	12	16	11977	3.8	455	12	7	12176	461	1	12537	473
		ILLINOIS	24	34	11948	3.8	456	21	14	12824	478	1	13090	487
		MICHIGAN	21	31	11349	3.8	423	17	14	12630	468	1	13160	477
		WISCONSIN	35	46	11644	3.8	435	34	13	12841	472	1	12812	473
		MINNESOTA	7	8	9747	4.0	381	7	10	11809	429	1	11474	413
		IOWA	7	14	10300	4.1	419	4	9	9808	359	2	9010	374
		MISSOURI	1	1	9200	4.0	370							
		NORTH DAKOTA	1	1	12600	3.5	442	1	19	13370	486	1	8360	300
		DELAWARE	5	7	11070	3.6	399	5	12	12633	452	2	12624	452
		MARYLAND	9	11	11159	4.0	444	9	14	12993	507	1	13054	496
		VIRGINIA	7	8	8215	3.8	308	7	19	11948	439	1	12560	459
		NORTH CAROLINA	1	2	9420	4.1	382	1	34	10150	343	1	10431	361
		SOUTH CAROLINA	1	1	7380	3.7	274	1	102	9930	369	1	10606	410

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREE	SIRE NO.	RECOROS FROM STATE	DAUGHTERS NO.	RECOROS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD	AV.
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	AV. LB.
1003598		UTAH	5	6	13912	3.6	485	5	14	12919	492		
		WASHINGTON	1	2	10250	4.5	452	1	12	13755	473	2	13249 474
		VERMONT	2	2	17690	4.4	715	1	63	11470	447	1	11609 462
		CONNECTICUT	8	9	11985	3.8	454	8	15	12301	463	1	13667 514
		NEW YORK	57	83	12722	3.7	463	43	22	13180	481	1	13391 491
		NEW JERSEY	5	6	11769	3.8	447	2	11	13575	494	1	13604 498
		PENNSYLVANIA	91	156	11880	3.7	439	90	12	11895	446	2	12104 453
		OHIO	10	20	11987	3.7	436	10	6	11970	440	2	11573 421
		INDIANA	24	41	12824	3.7	475	21	7	13081	480	2	12405 463
		ILLINOIS	38	68	13125	3.7	489	34	14	12455	464	2	12448 461
		MICHIGAN	29	49	13203	3.7	489	27	19	12625	460	2	13284 477
		WISCONSIN	90	154	12171	3.7	450	90	11	12143	442	2	12219 447
		MINNESOTA	3	4	12710	3.6	452	2	28	12863	471	2	13862 511
		IOWA	9	17	11338	3.8	426	9	13	11522	433	2	11568 436
		MISSOURI	3	6	10189	3.9	394	3	16	12862	448	2	14483 514
		NEBRASKA	2	2	13470	3.7	498	1	37	11760	426	1	11957 428
		DELAWARE	2	3	14235	3.9	542	2	10	11795	450	2	12137 470
		MARYLAND	12	21	10721	3.7	398	11	14	10803	404	1	11669 432
		VIRGINIA	5	5	14110	3.7	530	5	28	13210	485	1	12443 454
		WEST VIRGINIA	1	1	14820	3.8	563						
		KENTUCKY	1	6	11852	4.1	479	1	9	12547	448	5	12056 430
		ALABAMA	1	1	9590	3.7	355	1	16	7420	285		
		TEXAS	2	3	11883	3.6	428	1	26	12205	469	1	9112 407
		UTAH	1	2	8135	3.6	293	1	9	9470	333		
		WASHINGTON	1	2	12790	3.6	456	1	1	10730	407		
		OREGON	2	3	11550	3.7	426	2	8	12725	495	2	11682 480
		CALIFORNIA	1	3	14980	3.5	523	1	100	14257	524		
1024453		MASSACHUSETTS	1	1	8130	3.6	291	1	6	12750	434	1	13015 481
		NEW YORK	15	20	12794	3.6	457	13	27	13040	475	1	13266 480
		NEW JERSEY	3	4	12290	3.6	444	3	13	11858	429	1	12891 450
		PENNSYLVANIA	15	23	12352	3.7	456	15	14	11529	434	1	12678 469
		OHIO	3	5	12373	3.8	468	3	10	11986	450	1	13267 480
		INDIANA	3	3	16457	3.7	615	3	6	14107	563	1	9930 415
		ILLINOIS	7	8	13299	3.6	482	7	15	12222	459	1	12418 473
		MICHIGAN	9	11	13704	3.6	500	9	15	13167	476	1	13706 492
		WISCONSIN	13	16	13936	3.6	503	13	14	13234	481	1	13520 498
		MINNESOTA	5	10	13126	3.7	485	1	12	11390	434	1	12808 473
		IOWA	2	3	16743	3.4	565						
		MISSOURI	1	1	20380	3.5	707						
		NEBRASKA	1	1	11380	3.6	414	1	10	11900	454	1	13047 507
		MARYLAND	1	1	8730	3.9	340						
1030404		NEW HAMPSHIRE	1	1	13400	3.8	512	1	15	11670	444	1	12284 497
		VERMONT	2	3	13910	3.8	524	2	25	13480	488	1	14421 525
		MASSACHUSETTS	5	6	11516	3.5	402	5	10	12728	473	1	13098 502
		CONNECTICUT	2	2	7470	3.4	254	2	21	8440	306	1	7881 291
		NEW YORK	24	30	14072	3.5	491	21	15	13491	488	1	13661 495
		NEW JERSEY	2	2	10380	3.7	381	1	19	11440	419	1	11238 417
		PENNSYLVANIA	34	41	12641	3.6	452	34	15	12113	451	1	12395 461
		OHIO	8	8	12620	3.4	427	8	16	11544	413	1	12280 416
		INDIANA	6	6	12417	3.6	450	6	12	12983	470	1	12581 471
		ILLINOIS	6	7	13603	3.8	508	5	26	13654	498	1	12704 470
		MICHIGAN	5	6	13617	3.4	457	5	12	12683	468	1	12405 448
		WISCONSIN	4	4	13443	3.5	468	4	18	12688	464	1	12977 463
		MINNESOTA	1	1	11520	4.1	467	1	9	12570	507	1	12284 473
		IOWA	2	2	14240	3.7	520	1	5	9080	364	1	13047 453
		MISSOURI	2	3	16355	4.0	649	2	6	16315	652	1	15702 614
		DELAWARE	3	3	12720	3.4	433	3	12	12940	466	1	13371 484
		MARYLAND	3	3	13723	3.6	500	2	28	12620	458	1	12726 456
		VIRGINIA	2	2	14640	3.6	526	2	12	12310	481	1	11952 457
		WEST VIRGINIA	1	1	14280	3.5	500	1	36	14340	499	1	14017 500
		KENTUCKY	1	1	9270	3.4	312	1	7	13190	458	1	13244 462
		UTAH	1	1	15320	3.6	547	1	21	14800	556		
1035850		NEW YORK	1	1	11880	3.3	391	1	64	10990	389	1	11848 419
		PENNSYLVANIA	17	30	10797	3.9	424	17	10	11051	420	2	11572 429
		OHIO	1	2	9610	3.8	367	1	12	10765	379	2	11669 410
		INDIANA	8	19	11357	3.9	442	7	6	12775	503	2	11858 448
		ILLINOIS	3	3	12147	3.6	437	3	20	11067	425	1	11467 427
		MICHIGAN	3	4	11348	3.8	427	3	12	12400	467	2	11252 423
		WISCONSIN	11	22	12687	3.6	460	11	12	12561	453	2	12504 449
		MARYLAND	1	2	11310	3.5	392	1	8	9930	351		
1039565		NEW YORK	1	1	13190	4.7	615	1	8	11890	491		
		NEW JERSEY	4	10	14901	3.7	545	3	7	14127	553	2	13119 488
		PENNSYLVANIA	22	43	10987	3.9	422	22	10	11455	435	2	11517 433
		INDIANA	14	32	13469	3.7	500	10	7	13816	515	2	13946 515
		ILLINOIS	11	17	12494	3.6	454	11	17	13090	473	1	11897 430
		MICHIGAN	3	3	13943	3.4	488	3	11	12620	469	1	12601 481
		WISCONSIN	21	44	10480	3.7	382	21	9	11759	422	2	12049 433
		DELAWARE	1	2	12995	4.3	547	1	8	13560	511	2	15337 575
		MARYLAND	3	3	11793	3.8	443	3	19	11553	434	1	11391 425
		TEXAS	1	2	9140	3.5	320	1	25	8390	348	2	9178 398

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV. NO. RECORDS	MILK LB.	FAT LB.	YEARLY HERO RECORDS NO.	MILK LB.	AV. FAT LB.
1054406	MAINE		3	4	14077	3.6	500	2	8	11635	437	2	10486 407
	VERMONT		12	17	11566	3.7	432	8	20	13669	499	1	13812 511
	MASSACHUSETTS		4	6	11163	4.1	445	4	18	12344	476	2	13240 509
	CONNECTICUT		12	13	12705	3.9	490	11	17	13020	492	1	12799 480
	NEW YORK		110	144	12519	3.6	456	88	18	12921	473	1	12895 468
	NEW JERSEY		18	21	12924	3.7	478	14	23	12468	467	1	13000 485
	PENNSYLVANIA		228	375	11413	3.8	427	225	13	11754	442	2	12163 456
	OHIO		44	64	12596	3.7	460	41	11	13088	471	1	12969 465
	INDIANA		45	70	12241	3.8	459	42	7	12717	478	2	12901 483
	ILLINOIS		65	92	11857	3.7	436	59	17	12833	475	1	12429 462
	MICHIGAN		34	55	11489	3.7	429	34	16	12210	447	1	12657 460
	WISCONSIN		91	124	11870	3.6	432	85	10	12233	446	1	12133 442
	MINNESOTA		23	35	12013	3.7	435	23	19	12899	469	1	12165 460
	IOWA		16	25	12755	3.7	468	15	12	13198	483	1	13010 486
	MISSOURI		3	6	12235	3.5	416	3	15	11202	388	2	14242 492
	NORTH DAKOTA		2	3	14570	4.0	576	2	6	15190	581	1	12437 459
	SOUTH DAKOTA		1	1	15410	3.4	529	1	34	14210	483	1	15260 522
	KANSAS		2	3	15425	3.3	497	1	33	15040	529	1	14780 522
	DELAWARE		4	7	10702	3.9	409	4	25	11251	419	2	11564 432
	MARYLAND		20	33	10317	3.6	372	18	12	10677	413	2	11504 433
	VIRGINIA		10	11	13777	3.8	516	9	17	12815	483	1	13023 483
	WEST VIRGINIA		4	4	10673	3.7	385	2	5	11145	405	1	10639 369
	NORTH CAROLINA		3	4	12965	3.6	453	3	15	10290	359	1	10010 402
	ALABAMA		2	2	12065	3.3	383						
	TEXAS		1	2	11715	3.9	455	1	17	13275	476	2	12960 428
	IDAHO		1	1	11110	3.5	391	1	7	11950	444		
	COLORADO		1	1	7040	3.7	260	1	1	11320	423	1	10737 393
	ARIZONA		1	1	10990	3.5	386	1	48	13180	460	1	12470 433
	UTAH		11	15	12556	3.5	441	11	15	13338	486		
	WASHINGTON		2	2	12670	3.6	452	2	33	14305	519	1	13004 460
1055483	MAINE		1	1	9140	3.8	348						
	VERMONT		3	5	11665	3.9	446	3	15	11548	448	1	12213 460
	MASSACHUSETTS		3	4	9657	3.8	364	3	9	12353	446	1	12782 465
	CONNECTICUT		1	1	7950	3.6	287	1	29	10500	419	1	10682 435
	NEW YORK		45	61	12745	3.8	483	33	19	13183	483	1	12967 473
	NEW JERSEY		8	12	12400	3.9	488	4	26	12271	453	2	12632 467
	PENNSYLVANIA		122	232	11327	3.8	428	120	12	11577	433	2	12160 456
	OHIO		19	25	13744	3.7	512	19	13	12913	470	1	12913 460
	INDIANA		24	41	13352	3.7	494	19	7	13249	484	2	12829 469
	ILLINOIS		36	78	12879	3.9	495	34	12	12770	482	2	12495 468
	MICHIGAN		23	31	12455	3.8	465	21	16	12691	467	1	13070 484
	WISCONSIN		76	148	12219	3.7	454	74	11	12098	432	2	12192 440
	MINNESOTA		4	5	12409	4.0	490	4	14	13114	484	1	12977 471
	IOWA		2	3	10705	4.1	428	2	11	10278	408	2	10791 409
	MISSOURI		1	1	17560	3.8	672	1	49	14230	533	1	15554 594
	NORTH DAKOTA		1	1	10400	3.6	370						
	DELAWARE		4	6	9775	3.7	360	4	11	10523	382	2	9783 363
	MARYLAND		20	35	12346	3.8	468	19	16	11638	438	2	11720 444
	VIRGINIA		4	4	10153	3.8	379	3	66	13167	502	1	12797 471
	FLORIDA		1	1	12890	3.5	449	1	38	10940	390	1	9668 383
	KENTUCKY		2	4	10523	3.7	383	2	7	13603	511	1	11107 409
	MISSISSIPPI		1	3	10090	3.8	388	1	10	7703	347	1	7434 353
	UTAH		3	3	11937	3.7	441	3	9	12257	440		
	OREGON		2	3	9958	3.9	383	2	3	10788	433	1	10939 431
	CALIFORNIA		1	2	13270	3.6	476	1	2	14280	541		
1056882	MAINE		1	1	13150	3.7	486	1	5	10220	373	1	11990 446
	NEW HAMPSHIRE		3	3	11733	3.9	465	3	16	13220	535	1	12757 516
	VERMONT		43	52	12945	3.7	476	29	21	13097	484	1	12901 478
	MASSACHUSETTS		21	30	12882	3.8	490	21	17	12898	493	1	12743 490
	RHODE ISLAND		7	9	14861	3.7	553	7	7	12370	476	1	13300 517
	CONNECTICUT		36	46	13032	3.8	495	36	18	13339	506	1	13160 493
	NEW YORK		365	478	12592	3.7	460	314	18	12981	475	1	13087 478
	NEW JERSEY		74	100	12486	3.7	465	59	16	12878	474	1	12419 455
	PENNSYLVANIA		730	1246	11894	3.7	440	722	13	11762	441	2	12214 458
	OHIO		179	260	12320	3.6	447	167	10	12638	455	1	12676 456
	INDIANA		151	242	13053	3.7	479	140	7	13143	488	2	12894 478
	ILLINOIS		260	436	12577	3.8	469	252	14	12741	476	1	12543 468
	MICHIGAN		191	280	12553	3.6	456	184	16	12238	447	1	12706 462
	WISCONSIN		300	468	12365	3.7	451	285	12	12483	455	1	12498 457
	MINNESOTA		74	109	12669	3.7	460	73	14	12652	462	1	12300 452
	IOWA		45	73	13473	3.7	494	41	16	12940	474	2	11758 460
	MISSOURI		10	11	13791	3.8	517	10	27	12929	493	1	13160 496
	SOUTH DAKOTA		1	1	15260	3.0	451	1	73	11570	398	1	11870 402
	NEBRASKA		7	21	10767	3.6	385	7	8	12130	437	3	11718 412
	KANSAS		4	5	17379	3.4	594	3	19	15620	551	1	13465 491
	DELAWARE		43	69	12113	3.6	433	42	19	12314	444	2	12512 453
	MARYLAND		122	198	12046	3.8	451	117	17	12093	454	1	12380 466
	VIRGINIA		42	56	13359	3.7	489	34	25	12814	480	1	13104 487
	WEST VIRGINIA		7	10	13161	3.7	488	5	28	12136	430	1	12119 456
	NORTH CAROLINA		3	4	10136	3.5	358	3	30	11030	397	1	10847 386
	GEORGIA		3	3	10660	3.4	344	2	8	10375	372	1	9490 330
	FLORIDA		6	7	10443	3.5	366	6	21	9218	358	1	9010 358
	KENTUCKY		15	19	12688	3.7	474	15	8	13293	487	1	12340 452

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREE	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
1061894	ALABAMA	2	3	11038	3.6	384	2	50	8095	320	2	9418	368	
	ARKANSAS	1	1	7870	3.2	251	1	35	5320	221				
	LOUISIANA	1	1	12180	3.7	447	1	10	11660	443				
	TEXAS	2	3	13588	3.7	494	2	18	10745	391	1	10448	388	
	MONTANA	1	2	12995	4.2	541	1	15	13150	520				
	IOAHO	6	13	13619	3.5	478	6	9	12540	453	2	11311	417	
	COLORA00	9	10	12716	3.7	468	8	49	12250	427	1	12216	441	
	ARIZONA	2	3	17085	3.2	546	2	77	12595	444	2	11702	420	
	UTAH	23	33	12562	3.8	472	23	14	12827	469				
	WASHINGTON	4	4	13158	3.7	486	3	6	12500	461	1	13614	489	
	OREGON	2	2	11725	3.7	432	2	4	12770	513				
	VERMONT	3	4	10653	3.6	390	3	17	12663	465	1	13131	483	
	CONNECTICUT	2	2	14470	4.1	590	2	10	13230	501	1	13298	498	
	NEW YORK	21	31	12837	3.7	478	17	17	14307	522	1	13764	496	
	NEW JERSEY	1	1	11780	3.7	440								
	PENNSYLVANIA	46	78	11521	3.9	442	46	12	11728	438	2	12298	461	
	OHIO	15	25	11441	3.9	440	13	16	12449	447	1	12031	426	
	INOIANA	23	43	13221	3.8	506	21	6	13416	511	2	13111	490	
	ILLINOIS	34	62	12083	3.8	462	29	15	12211	457	2	12078	451	
	MICHIGAN	11	21	11931	3.7	441	9	17	12575	449	2	12789	461	
	WISCONSIN	27	37	11508	3.8	433	26	10	11900	431	1	12085	449	
	MINNESOTA	6	11	11440	3.7	423	5	17	12078	425	2	11666	428	
	IOWA	1	1	10350	4.0	418	1	21	12110	444	1	11238	408	
	MISSOURI	1	1	13070	4.0	528								
	NEBRASKA	1	1	12340	3.5	433	1	42	13170	466	1	14257	504	
	DELAWARE	2	3	13480	3.8	512	2	16	12415	444	2	13729	478	
	MARYLAND	3	6	13044	3.9	511	2	18	12842	474	2	12599	496	
	VIRGINIA	2	2	11310	4.0	441								
	TEXAS	1	1	14490	3.8	556	1	2	11700	418				
	IOAHO	1	1	14250	3.6	508	1	5	13920	495	1	13592	495	
	COLORA00	1	2	11260	3.7	417	1	5	13980	529	1	12644	494	
	1061911	VERMONT	3	5	10885	3.6	396	3	13	11545	428	2	12657	468
	MASSACHUSETTS	1	1	12320	3.8	469	1	2	13700	491	1	12491	469	
	RHODE ISLAND	1	1	15260	3.8	586	1	9	11420	531	1	12175	532	
	CONNECTICUT	5	6	12478	3.7	459	5	21	14178	526	1	14426	541	
	NEW YORK	24	34	12957	3.5	450	23	18	13624	493	1	13718	496	
	NEW JERSEY	7	12	13166	3.5	452	3	13	12557	459	1	11930	430	
	PENNSYLVANIA	54	81	11619	3.5	404	54	16	11260	416	1	11705	433	
	OHIO	9	10	12975	3.4	437	7	7	12919	471	1	13115	484	
	INOIANA	10	12	12736	3.6	457	8	9	12020	439	1	12635	467	
ILLINOIS	20	28	12121	3.6	429	20	12	12442	459	1	11953	438		
MICHIGAN	8	13	11773	3.4	396	7	18	12808	470	1	13444	484		
WISCONSIN	12	18	12818	3.5	448	12	8	12614	459	1	12596	459		
MINNESOTA	5	6	12365	3.3	400	5	19	12682	465	1	12717	468		
SOUTH DAKOTA	1	2	13815	3.9	535	1	4	11750	474	1	9494	377		
DELAWARE	1	2	9760	3.4	327	1	17	11285	406	2	13729	478		
VIRGINIA	2	3	11680	3.6	409	2	27	11828	413	2	11696	414		
GEORGIA	1	3	11013	3.7	404	1	29	13317	485	2	12551	465		
FLORIDA	1	1	7110	3.8	267	1	34	10640	382	1	9668	383		
IOAHO	1	7	11843	3.5	408	1	4	11641	400	3	11354	382		
1073818	NEW YORK	2	2	8440	3.9	328	2	25	11140	407				
NEW JERSEY	2	3	10130	3.9	388									
PENNSYLVANIA	15	29	11004	3.8	420	15	9	11676	427	2	11843	445		
INOIANA	6	12	10712	3.5	381	6	9	11456	421	2	12195	409		
ILLINOIS	9	18	10805	3.8	412	9	11	11180	424	2	11427	423		
MICHIGAN	4	10	12864	3.9	512	3	11	13936	514	4	14407	535		
WISCONSIN	16	31	11963	3.7	444	15	12	11720	432	2	11887	447		
IOWA	2	2	9775	3.2	315	2	2	13085	532	1	13107	465		
VIRGINIA	1	1	14510	4.1	601	1	27	13480	524	1	12797	491		
TEXAS	1	1	12330	3.3	413	1	24	11870	417	1	11543	428		
1081270	MAINE	1	1	8920	3.3	292	1	3	7340	256				
NEW HAMPSHIRE	1	2	14215	4.2	592	1	9	11955	432	2	12023	456		
VERMONT	4	6	12983	4.0	525	4	10	12021	452	2	13157	498		
MASSACHUSETTS	4	5	12628	3.8	471	4	12	12110	434	1	12053	447		
CONNECTICUT	1	1	10180	3.7	382	1	26	12750	451	1	13222	460		
NEW YORK	44	62	12361	3.8	476	36	18	13152	484	1	12900	470		
NEW JERSEY	11	15	11325	3.9	446	10	14	12417	463	1	12208	454		
PENNSYLVANIA	105	176	11497	3.9	449	103	13	11538	432	2	11920	444		
OHIO	13	15	11961	4.1	483	12	10	11582	425	1	11499	414		
INOIANA	19	25	11408	4.0	452	16	9	12780	476	1	12579	471		
ILLINOIS	25	39	11374	4.0	451	24	11	11832	447	2	12012	448		
MICHIGAN	21	27	12284	3.7	456	20	15	11906	433	1	12656	459		
WISCONSIN	32	48	12184	3.8	458	31	16	12768	463	1	12606	457		
MINNESOTA	5	10	13412	3.8	510	5	16	13699	482	2	12686	451		
IOWA	2	2	11300	3.5	402	2	15	15845	572	1	16514	627		
DELAWARE	2	2	15220	4.0	599	2	7	12845	460	1	12742	467		
MARYLAND	9	14	11064	4.0	439	9	12	10960	419	2	11298	428		
VIRGINIA	3	4	13438	3.8	519	3	23	11878	444	1	12181	453		
WEST VIRGINIA	1	1	13190	3.7	485	1	8	12840	459	1	13963	500		
OKLAHOMA	1	1	10770	4.9	527	1	23	8070	335	1	8633	341		
TEXAS	1	1	6650	3.6	238	1	1	6650	238	1	11314	411		

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BRED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
		UTAH	3	4	11637	4.1	470	3	3	9572	368			
		WASHINGTON	1	1	15430	3.6	560	1	13	13000	443	1	13941	489
1081684		NEW HAMPSHIRE	1	1	10430	4.6	478							
		VERMONT	5	8	12500	3.9	485	4	32	13596	506	2	13272	493
		MASSACHUSETTS	1	2	9200	3.7	338	1	21	10655	424	2	9892	408
		NEW YORK	31	49	11118	4.0	440	17	19	13000	472	1	12654	483
		NEW JERSEY	9	17	11079	4.0	439	4	16	13115	504	3	13134	501
		PENNSYLVANIA	158	295	10747	3.9	420	158	13	11781	440	2	11924	449
		OHIO	13	26	12784	3.6	463	13	12	13590	485	2	13242	468
		INDIANA	32	54	11929	3.9	457	31	8	13093	489	2	12927	478
		ILLINOIS	35	62	11936	4.0	476	34	12	12995	489	2	13002	490
		MICHIGAN	19	29	10881	4.0	427	19	14	12052	447	1	12643	470
		WISCONSIN	43	77	10981	3.9	428	40	14	12337	448	2	11806	432
		MINNESOTA	3	7	11158	4.0	446	3	11	13345	487	2	13284	480
		IOWA	3	5	12670	4.0	503	3	35	13566	493	1	11487	458
		MISSOURI	1	1	9590	4.2	405	1	3	13130	482	1	11369	419
		NORTH DAKOTA	1	2	12615	4.6	578	1	14	12520	497	1	12208	447
		DELAWARE	2	3	9868	3.8	368	2	11	10300	361	2	10045	361
		MARYLAND	14	27	11580	3.9	454	12	16	12477	476	2	13086	502
		VIRGINIA	7	11	10290	3.9	401	5	22	13028	483	1	13195	487
		NORTH CAROLINA	1	1	9590	3.5	331	1	6	11300	397	1	11260	374
		KENTUCKY	1	2	15160	3.8	576	1	12	12285	429	1	12633	468
		IOAHO	1	2	10480	3.8	397	1	2	15180	522			
		WASHINGTON	1	2	10820	3.5	371	1	16	13845	487	1	13374	471
1088707		NEW YORK	9	16	12569	3.7	461	8	17	12834	471	2	12117	431
		NEW JERSEY	3	5	11948	3.5	424							
		PENNSYLVANIA	29	70	11699	3.7	435	29	11	11334	429	2	11801	444
		OHIO	5	9	14333	3.6	506	4	6	13946	508	2	13355	466
		INDIANA	12	33	14104	3.6	511	12	6	13035	491	3	12820	477
		ILLINOIS	13	22	12669	3.7	470	13	14	12681	480	2	12695	477
		MICHIGAN	3	3	14990	3.6	545	3	15	13367	491	1	12917	479
		WISCONSIN	41	67	12353	3.7	450	37	11	12167	443	2	12116	451
		MARYLAND	3	5	12700	3.7	477	3	23	12190	465	2	11337	475
		VIRGINIA	1	1	14670	4.0	585							
		NORTH CAROLINA	1	1	13830	3.6	495	1	10	10480	365	1	11936	438
1088709		VERMONT	2	5	15758	3.6	562	1	4	15965	604	1	14268	538
		MASSACHUSETTS	1	2	12295	3.5	427	1	12	10140	410	2	9243	392
		NEW YORK	14	17	11816	3.5	410	8	11	12986	463	1	13231	468
		NEW JERSEY	1	2	13785	4.0	550							
		PENNSYLVANIA	39	66	10957	3.6	394	38	11	11484	432	2	11674	438
		OHIO	14	22	12391	3.6	437	14	8	12676	454	1	13428	471
		INDIANA	17	34	13051	3.5	449	17	5	13038	488	2	12912	475
		ILLINOIS	9	18	11787	3.6	419	9	13	12131	456	1	12280	447
		MICHIGAN	9	16	12883	3.6	458	9	14	12684	454	2	13002	468
		WISCONSIN	15	23	11155	3.6	398	15	11	11853	428	1	11598	417
		MINNESOTA	1	1	14210	3.8	534							
		IOWA	3	4	8677	4.1	336	3	7	10187	363	2	10402	377
		DELAWARE	2	3	10118	3.4	338	2	12	9673	379	2	10353	404
		MARYLAND	4	9	13501	3.8	515	4	11	13316	537	2	13279	531
		VIRGINIA	3	4	11110	3.7	406	3	23	13333	492	1	11761	446
1092773		VERMONT	1	1	13260	3.3	440	1	1	10830	450	1	12110	460
		NEW YORK	13	21	13318	3.5	469	8	11	12564	466	2	12458	452
		NEW JERSEY	5	9	13735	3.6	496	2	5	12918	466	2	14171	513
		PENNSYLVANIA	39	67	11690	3.6	424	38	12	11582	436	2	12314	461
		OHIO	1	1	10990	3.7	406							
		INDIANA	16	26	12440	3.6	442	15	7	12513	462	2	12507	458
		ILLINOIS	10	17	14006	3.6	503	10	13	13324	484	1	12538	457
		MICHIGAN	5	9	12131	3.7	443	5	10	10287	396	2	12541	457
		WISCONSIN	10	15	12708	3.7	459	10	9	12621	460	1	12437	453
		IOWA	5	7	12455	3.6	446	5	10	13066	469	2	15789	589
		DELAWARE	2	2	13095	3.5	454	2	25	13160	501	1	12731	479
		MARYLAND	6	13	11888	4.1	482	6	24	11906	450	2	12387	467
		VIRGINIA	2	4	15078	3.5	516	2	38	15895	565	2	14982	545
		KENTUCKY	1	2	11070	3.7	405	1	11	12685	462	1	11053	399
1094921		MAINE	2	3	9970	4.0	395	2	19	10915	398	2	11238	409
		VERMONT	7	9	11455	3.7	432	6	16	12783	477	1	12307	454
		MASSACHUSETTS	3	3	11643	3.9	445	3	23	11690	427	1	12333	468
		CONNECTICUT	2	2	11880	3.7	437	2	20	11175	430	1	11195	423
		NEW YORK	58	74	11777	3.8	444	50	22	12707	463	1	12792	465
		NEW JERSEY	4	6	12603	3.8	474	4	13	12774	472	2	12124	450
		PENNSYLVANIA	107	157	10650	3.8	407	106	12	11669	437	1	12212	458
		OHIO	25	34	11627	3.7	427	22	8	13013	471	1	12938	469
		INDIANA	25	38	12162	3.8	463	22	6	13127	490	1	12566	471
		ILLINOIS	31	55	11688	3.8	447	31	14	12891	478	2	12596	458
		MICHIGAN	36	51	11818	3.8	441	33	16	12688	469	1	12552	456
		WISCONSIN	35	52	11682	3.8	442	33	14	12385	454	1	12199	445
		MINNESOTA	12	19	11729	3.6	416	12	15	12276	447	1	11817	446
		IOWA	7	16	12565	3.9	484	7	10	13824	502	2	12934	473
		MISSOURI	1	3	15113	4.0	606	1	15	15220	581	2	14726	566
		NEBRASKA	1	2	15610	3.7	572	1	36	14680	541	1	14377	519

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO			AV. FAT LB.
								NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	
		KANSAS	1	2	13820	3.4	469		1	21	12590	442	2	11957	424
		DELAWARE	3	3	11867	3.8	445		3	26	11620	420	1	12470	447
		MARYLAND	13	20	10608	4.0	421		13	17	11539	431	1	11822	442
		VIRGINIA	5	7	11145	3.8	426		4	16	13175	484	1	11725	449
		WEST VIRGINIA	1	1	11600	3.5	405		1	17	12320	443	1	13233	474
		GEORGIA	1	1	11170	3.4	376		1	9	10000	423	1	12906	508
		KENTUCKY	1	1	6090	3.6	221								
		UTAH	3	6	12047	3.8	441		3	19	12085	455			
1104657		NEW YORK	4	5	14810	4.0	586		3	14	14037	525	1	14061	510
		NEW JERSEY	1	1	9760	3.7	357								
		PENNSYLVANIA	12	26	10622	4.0	425		12	13	10817	406	2	11412	422
		OHIO	1	4	15980	3.8	595		1	4	11953	438	2	14563	500
		INDIANA	11	20	13583	4.0	541		10	6	13846	513	2	13887	518
		ILLINOIS	11	23	11704	4.2	482		11	10	12222	453	2	11527	429
		MICHIGAN	5	9	11090	4.0	431		5	20	12462	450	2	13080	477
		WISCONSIN	28	54	11179	3.9	439		26	10	12089	440	1	12256	448
		IOWA	3	6	11503	3.9	449		3	13	12405	456	2	11887	430
		MARYLAND	1	1	10330	3.4	356		1	16	11110	389			
		VIRGINIA	1	2	10910	4.1	443		1	6	10790	387	1	13091	491
		WEST VIRGINIA	1	1	10880	4.4	476								
		NORTH CAROLINA	1	1	15160	3.7	555		1	21	13810	507			
		KENTUCKY	1	1	8140	4.0	325		1	33	12430	426	1	9995	335
		TENNESSEE	1	2	9685	3.6	344								
		IDAHO	2	3	14945	3.7	549		2	25	14108	500	1	14628	510
1106775		MAINE	1	1	10310	3.7	378		1	3	9550	372	1	8600	359
		VERMONT	4	4	13800	3.7	506		4	15	14158	500	1	14295	521
		MASSACHUSETTS	5	7	12512	3.7	462		5	14	12050	451	1	12026	450
		CONNECTICUT	6	6	13423	3.7	502		5	19	13144	478	1	12984	471
		NEW YORK	51	69	12178	3.7	445		39	22	13107	481	1	13241	482
		NEW JERSEY	4	6	12710	3.4	437		2	15	11785	437	2	11149	413
		PENNSYLVANIA	102	165	11685	3.7	433		101	15	11690	438	2	12093	453
		OHIO	18	24	12612	3.7	470		16	12	12879	464	1	12840	455
		INDIANA	24	38	12567	3.7	461		20	5	12849	468	1	12345	450
		ILLINOIS	27	54	12041	3.8	455		27	15	12303	466	2	12192	461
		MICHIGAN	17	22	11699	3.6	426		16	15	12867	473	1	13066	465
		WISCONSIN	36	52	11871	3.6	426		35	10	12423	450	1	12181	445
		MINNESOTA	6	7	11835	3.6	429		6	16	12691	456	1	12688	466
		IOWA	5	11	13989	3.6	506		4	12	13385	485	2	13291	506
		MISSOURI	1	1	11390	3.7	426		1	10	11380	418	1	11619	458
		NORTH DAKOTA	2	2	13825	3.7	510		2	7	15200	590	1	12437	459
		DELAWARE	1	1	11030	3.8	421		1	21	10800	383	1	11968	422
		MARYLAND	14	23	11290	3.8	429		14	17	12066	452	2	12249	454
		VIRGINIA	3	5	12667	3.7	466		3	5	13198	503	2	13233	493
		WEST VIRGINIA	1	1	9950	3.6	363		1	6	11680	427	1	11292	409
		FLORIDA	1	4	8048	3.6	291		1	4	6980	294	1	6900	279
		COLORADO	1	2	12640	3.9	491		1	12	10750	391	1	10704	397
		ARIZONA	1	3	11647	3.0	349		1	52	11580	386	3	10915	360
		UTAH	2	2	9240	3.6	337		2	10	11905	436			
		WASHINGTON	2	3	13263	3.7	490		2	10	12970	456	2	13113	473
1111075		MAINE	1	1	13950	3.4	472		1	13	11230	413	1	11020	400
		VERMONT	5	7	13462	3.7	493		5	31	13036	486	1	12926	477
		MASSACHUSETTS	10	14	12159	3.8	457		10	10	12042	456	1	12055	460
		CONNECTICUT	4	5	12639	3.9	490		2	7	13565	519	2	13010	487
		NEW YORK	43	55	11708	3.7	430		37	19	12498	464	1	12793	468
		NEW JERSEY	7	9	13145	3.5	459		4	23	12698	483	1	11903	439
		PENNSYLVANIA	89	140	10318	3.8	386		88	14	11537	434	1	11981	449
		OHIO	9	11	11312	3.6	407		9	8	12903	485	1	13351	493
		INDIANA	22	32	12412	3.8	470		19	8	12973	476	2	12716	477
		ILLINOIS	23	39	11946	3.6	430		23	12	12436	464	2	11993	446
		MICHIGAN	23	33	12547	3.6	457		23	15	11647	424	1	12679	457
		WISCONSIN	39	64	11846	3.7	436		38	10	11993	435	1	11957	437
		MINNESOTA	7	10	14159	3.5	500		7	10	13434	481	1	12979	464
		IOWA	1	1	9300	3.7	341		1	10	10750	403			
		MISSOURI	1	1	8720	3.4	299		1	1	12720	477			
		NORTH DAKOTA	1	1	14340	3.8	538		1	62	12140	448	1	11990	434
		NEBRASKA	1	4	11985	3.7	447		1	7	12728	501	3	12459	483
		DELAWARE	1	1	14280	3.6	512		1	9	13190	480	1	13625	494
		MARYLAND	14	19	10768	3.9	413		14	15	11793	434	1	11921	436
		WEST VIRGINIA	1	4	10000	3.5	345		1	2	6460	269	3	8204	311
		NORTH CAROLINA	1	1	8990	3.4	305		1	43	9520	342	1	11985	348
		OKLAHOMA	1	1	10640	4.7	496								
		COLORADO	1	2	9300	4.1	380		1	2	13175	501	2	10475	401
		UTAH	3	4	11173	3.6	397		3	6	15003	553	2	11979	422
		WASHINGTON	1	2	12880	4.0	507		1	7	15375	551	2	13146	465
1111076		MAINE	1	2	16005	3.8	604		1	5	14365	550	2	14110	553
		VERMONT	2	2	13285	3.8	499		2	21	13390	514	1	13620	510
		MASSACHUSETTS	4	5	12431	3.7	454		3	4	12197	456	2	13473	506
		CONNECTICUT	7	7	10604	3.7	394		6	14	13230	493	1	13543	507
		NEW YORK	49	70	12882	3.6	465		43	18	13117	479	1	12917	477
		NEW JERSEY	11	13	13434	3.7	491		7	23	13204	477	1	12896	470
		PENNSYLVANIA	106	178	12010	3.6	432		102	14	11485	432	2	11920	445

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY		AV. FAT LBS.	YEARLY HERD		AV. FAT LBS.
								NO. DAUS.	RECORDS NO.		RECORDS NO.	MILK LBS.	
		OHIO	16	22	12483	3.6	442	13	11	13174	477	1	13224
		INDIANA	39	64	12422	3.6	453	37	7	13064	485	2	12639
		ILLINOIS	21	35	13272	3.7	482	21	17	12241	462	2	12281
		MICHIGAN	16	25	14137	3.4	480	16	11	13038	480	1	13084
		WISCONSIN	31	50	12562	3.6	451	31	8	12251	447	1	12359
		MINNESOTA	15	28	12928	3.6	460	14	14	12243	444	2	12673
		IOWA	8	13	14341	3.6	507	7	8	14802	536	1	13869
		MISSOURI	2	2	15520	3.8	580	2	25	11465	416	1	15554
		NEBRASKA	3	4	10715	3.6	387	3	5	10808	402	1	10608
		KANSAS	1	1	9380	3.0	282	1	3	13380	511	1	12197
		DELAWARE	3	5	11257	3.6	403	3	27	12413	445	2	13309
		MARYLAND	12	23	12948	3.7	474	12	13	11495	442	2	11306
		VIRGINIA	1	2	14385	3.8	543	1	15	11390	464	2	11233
		WEST VIRGINIA	3	5	13186	3.7	487	2	19	11415	427	1	10993
		SOUTH CAROLINA	1	1	9750	3.2	314	1	60	9620	366	1	10606
		GEORGIA	4	6	10941	3.5	381	4	31	11496	412	1	11885
		FLORIDA	1	1	14130	3.3	467	1	65	10840	391	1	9865
		KALAHOMA	1	3	8833	4.3	385	1	8	10637	407	3	11514
		IDAHO	1	1	13970	3.2	451	1	8	13590	477	1	12219
		UTAH	1	1	15600	3.2	494	1	10	10030	327		
		WASHINGTON	1	1	14490	3.9	561	1	15	13720	482	1	13701
1113278		MAINE	2	2	12940	3.7	470	2	9	11180	463	1	11189
		VERMONT	6	7	12906	3.7	483	6	16	13238	476	1	12936
		MASSACHUSETTS	3	3	11203	4.0	450	3	8	12673	489	1	14264
		CONNECTICUT	3	4	12970	3.7	481	3	16	13265	496	1	14130
		NEW YORK	71	96	12602	3.7	463	59	19	12875	471	1	12698
		NEW JERSEY	18	21	12071	3.8	454	14	17	11690	437	1	12636
		PENNSYLVANIA	187	318	12090	3.8	453	183	13	11825	442	2	12283
		OHIO	38	51	12356	3.8	463	35	12	12309	445	1	12780
		INDIANA	30	47	13209	3.7	482	27	6	12845	464	1	13306
		ILLINOIS	47	81	13260	3.8	498	44	14	12666	477	2	12299
		MICHIGAN	43	60	10949	3.9	419	42	17	12446	455	1	12644
		WISCONSIN	60	93	12126	3.7	444	59	12	12274	444	1	12208
		MINNESOTA	11	13	12629	3.6	459	8	10	12459	455	1	12546
		IOWA	16	23	13007	3.7	482	14	13	13437	485	1	13167
		MISSOURI	1	1	13740	3.8	526	1	43	13170	472	1	12568
		DELAWARE	6	11	11478	3.7	419	6	31	11052	390	2	11253
		MARYLAND	22	30	11086	3.7	417	21	16	11251	421	1	11730
		VIRGINIA	4	8	13438	3.7	489	4	17	12855	483	2	13302
		WEST VIRGINIA	3	3	9957	3.8	383	2	14	11530	410	1	12742
		NORTH CAROLINA	1	1	9540	4.1	393	1	27	9250	326	1	9679
		FLORIDA	1	2	11200	4.0	438	1	37	10890	395	2	9767
		TEXAS	2	3	8633	3.3	287	2	14	9158	326	2	10927
		IDAHO	1	1	13910	3.3	457	1	12	14870	521	1	12895
		COLORADO	4	2	10840	4.2	452	1	5	10705	420	1	9919
		UTAH	1	5	13511	3.7	502	4	14	13080	484		
		WASHINGTON	2	2	11565	4.1	462	2	6	13220	478	1	12372
		OREGON	2	2	9175	3.9	355	1	4	13100	503	1	11696
1115426		NEW YORK	1	2	10570	3.9	412	1	10	12485	458	2	11854
		PENNSYLVANIA	3	5	12298	3.8	465	3	6	11980	458	2	11198
		ILLINOIS	1	1	12610	3.4	423	1	14	7520	278		
		WISCONSIN	1	2	6895	3.4	230	1	3	8775	326	1	9396
		NEBRASKA	1	3	12370	3.7	463	1	7	12147	478	1	13047
1115429		PENNSYLVANIA	1	1	13350	4.1	545	1	15	12940	483	1	12197
		ILLINOIS	1	2	13535	3.6	484	1	5	11830	448	2	11660
		WISCONSIN	1	1	8460	4.0	338	1	12	13320	484	1	12808
1119067		ILLINOIS	1	2	15110	3.6	537	1	5	14135	507	2	13838
		WISCONSIN	2	5	13064	3.9	502	2	10	14924	537	3	14510
		KENTUCKY	1	1	10180	3.6	369	1	1	10800	396		
1119514		MAINE	1	1	13620	3.6	494	1	7	14600	557	1	12066
		VERMONT	5	5	12514	3.5	438	4	22	12773	502	1	12628
		MASSACHUSETTS	12	15	12535	3.5	441	12	8	11442	423	1	12205
		CONNECTICUT	5	8	15728	3.5	555	5	19	13692	506	2	14251
		NEW YORK	90	116	12953	3.4	445	75	22	12861	466	1	13162
		NEW JERSEY	18	21	14041	3.6	499	16	18	13937	517	1	13061
		PENNSYLVANIA	128	203	12229	3.5	426	127	14	11815	442	2	12150
		OHIO	30	40	12610	3.4	430	30	12	13033	473	1	13105
		INDIANA	36	61	13975	3.5	484	33	7	13269	496	2	13186
		ILLINOIS	41	60	13337	3.6	471	40	12	12577	474	1	12927
		MICHIGAN	21	25	12840	3.5	437	21	14	12698	460	1	13068
		WISCONSIN	58	88	12741	3.4	435	55	12	12662	465	1	12624
		MINNESOTA	14	19	13921	3.3	460	14	13	12575	451	1	12893
		IOWA	5	6	13279	3.4	451	4	18	12098	454	1	13264
		MISSOURI	1	1	14570	4.1	597	1	31	13630	543	1	14235
		NORTH DAKOTA	1	1	17400	3.9	680	1	11	14950	577	1	12437
		NEBRASKA	2	4	13803	3.4	460	2	36	13118	481	2	11898
		DELAWARE	7	10	13588	3.4	468	7	23	12884	461	1	12462
		MARYLAND	19	23	13463	3.4	463	17	15	12152	453	1	11890
		VIRGINIA	1	2	12815	3.5	444	1	13	12715	468	2	13898
		NORTH CAROLINA	3	4	12048	3.9	462	3	14	12963	477	1	13135

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD		
								NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		FLORIDA	2	4	12812	3.3	418	2	20	8295	327	1	8061	314
		KENTUCKY	1	1	13150	3.4	449	1	16	12940	477	1	12906	458
		TEXAS	1	1	9420	3.8	359	1	1	11210	425			
		IOAHO	2	5	15344	3.3	470	2	11	12734	434	2	12238	422
		WYOMING	2	2	9840	3.4	328	2	5	11040	384			
		COLORADO	5	6	11312	3.6	403	4	14	11738	430	1	10987	405
		ARIZONA	2	3	11810	3.3	394	2	64	11828	404	2	12315	427
		UTAH	3	4	11607	3.5	403	3	3	11570	415			
		WASHINGTON	1	1	12570	3.4	432	1	14	12980	461	1	13298	474
		OREGON	1	1	11590	3.2	373					1	13985	504
		CALIFORNIA	1	1	18180	2.7	489	1	31	17970	632			
1125395		MAINE	3	3	11303	4.1	462	3	6	11457	464	1	10432	422
		VERMONT	4	5	10590	3.8	401	2	13	11445	452	1	12617	462
		MASSACHUSETTS	8	10	11979	3.6	436	8	16	13183	499	1	13128	491
		RHODE ISLAND	2	2	12940	4.0	513							
		CONNECTICUT	8	9	11451	3.7	422	8	18	13438	521	1	13038	494
		NEW YORK	66	78	11989	3.7	440	61	20	12682	468	1	12999	477
		NEW JERSEY	9	12	11549	3.6	414	8	18	12844	463	1	11701	431
		PENNSYLVANIA	105	157	11573	3.7	431	104	13	12049	453	1	12424	469
		OHIO	33	43	12554	3.6	449	28	9	13070	464	1	12867	457
		INDIANA	9	10	12597	3.6	459	8	5	13159	498	1	13054	487
		ILLINOIS	43	58	12584	3.7	465	37	15	12935	484	1	13084	491
		MICHIGAN	40	45	12438	3.7	456	38	17	12922	481	1	12922	472
		WISCONSIN	36	57	13491	3.6	489	35	13	12729	468	1	12583	463
		MINNESOTA	21	27	12557	3.7	461	20	14	12851	461	1	12682	468
		IOWA	11	13	11969	3.6	428	10	18	11978	443	1	11123	461
		MISSOURI	1	2	13340	3.8	498	1	44	12815	478	1	13036	455
		NEBRASKA	2	2	9485	4.0	380	2	21	14230	547	1	12481	489
		DELAWARE	5	8	11874	3.6	420	5	45	11387	412	2	12158	436
		MARYLAND	14	19	11888	3.6	426	14	17	11748	447	1	12124	464
		VIRGINIA	3	4	11178	3.7	415	3	17	11640	434	1	11422	424
		NORTH CAROLINA	1	1	8410	3.4	286	1	35	10160	347	1	10431	361
		FLORIDA	1	2	11350	3.3	378	1	40	10110	374	1	9865	365
		ARIZONA	1	1	15140	3.3	501	1	55	14000	492	1	12350	464
		UTAH	9	11	13706	3.6	500	8	9	13110	489			
		WASHINGTON	1	1	11330	3.7	415	1	14	13070	462	1	13036	468
1132993		MAINE	1	2	13040	4.2	546	1	9	16185	610	1	15097	588
		VERMONT	11	14	13608	3.8	513	10	27	12823	476	1	12726	474
		MASSACHUSETTS	9	14	12428	3.8	478	9	17	11859	444	1	11987	452
		CONNECTICUT	5	5	13468	3.9	528	5	13	13362	496	1	14033	526
		NEW YORK	97	132	12734	3.7	467	78	18	12602	467	1	12602	464
		NEW JERSEY	22	29	13502	3.7	496	18	17	13141	481	1	12877	471
		PENNSYLVANIA	207	318	12430	3.8	467	205	14	11611	436	1	12156	456
		OHIO	29	44	12894	3.7	478	26	8	12994	466	1	13108	463
		INDIANA	36	55	13518	3.8	508	32	6	12894	473	1	13508	491
		ILLINOIS	62	83	13262	3.7	491	57	15	12713	476	1	12425	466
		MICHIGAN	34	50	13122	3.7	477	33	13	12232	446	1	13055	471
		WISCONSIN	62	84	12483	3.8	467	60	13	12506	459	1	12311	451
		MINNESOTA	17	24	13346	3.6	479	16	17	12588	457	1	12372	465
		IOWA	14	20	14164	3.6	510	14	12	13597	497	1	13226	478
		MISSOURI	1	2	13040	3.8	490	1	6	10935	365			
		NORTH DAKOTA	1	1	20470	3.9	796	1	11	14670	566	1	12437	459
		DELAWARE	6	9	10617	3.8	396	6	15	11878	438	2	11740	430
		MARYLAND	21	29	11843	3.7	436	18	16	11638	437	1	12306	461
		VIRGINIA	7	12	13371	3.9	516	6	31	13769	517	2	14157	526
		WEST VIRGINIA	1	2	16210	3.9	632							
		FLORIDA	2	2	15705	3.5	548	2	42	11025	394	1	9767	374
		IOAHO	1	1	13130	3.8	503	1	8	12250	451	1	11183	403
		UTAH	2	3	14185	3.9	548	2	16	12895	491			
		WASHINGTON	1	1	19390	3.6	696	1	6	13550	489	1	13004	460
1145480		PENNSYLVANIA	1	1	7190	3.6	260	1	23	10340	368	1	10726	384
		OHIO	1	1	7080	4.1	290	1	12	10100	414	1	10846	417
		ILLINOIS	1	2	9660	4.0	383	1	10	10230	410	2	10465	403
1153740		MAINE	5	5	10730	3.7	392	5	6	12188	441	1	12666	463
		NEW HAMPSHIRE	2	2	9500	3.7	352	2	14	12100	462	1	12284	497
		VERMONT	5	6	12218	4.0	489	5	21	12083	473	1	11905	468
		MASSACHUSETTS	1	1	4340	4.0	174	1	4	12590	425	1	10301	362
		CONNECTICUT	8	10	13091	3.8	491	8	17	13597	504	1	13757	514
		NEW YORK	27	33	11382	3.7	418	26	19	12272	463	1	12491	464
		NEW JERSEY	2	3	14988	3.7	561	2	10	15975	591	2	15530	587
		PENNSYLVANIA	41	64	10686	3.8	403	40	11	11822	444	1	12251	460
		OHIO	10	10	11224	3.9	432	8	12	12310	433	1	12017	427
		INDIANA	2	2	15135	4.0	606	2	6	15555	572			
		ILLINOIS	6	7	11848	3.8	446	6	19	11949	431	1	12314	458
		MICHIGAN	7	7	8661	3.8	326	7	19	11534	428	1	12849	473
		WISCONSIN	12	13	13622	3.6	493	12	11	13515	488	1	13202	481
		MINNESOTA	7	8	10530	3.6	382	7	14	13392	478	1	13142	477
		IOWA	1	1	8790	4.0	355	1	12	12630	437	1	13560	457
		MISSOURI	2	4	9475	3.9	369	1	9	11910	455	1	11505	437
		DELAWARE	1	1	11800	3.5	415	1	21	10870	394	1	11216	409
		MARYLAND	5	5	12190	3.7	446	5	16	12692	459	1	12423	450

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV.			YEARLY HERD			AV.		
								NO. O AUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.		
1156059	WEST VIRGINIA	1	1	11110	3.5	389	1	8	13100	471	1	13821	494						
	NORTH CAROLINA	1	1	13050	4.3	562	1	12	16900	586	1	14105	501						
	MISSISSIPPI	1	1	12800	3.7	469	1	3	12650	462									
	IDAHO	1	1	12950	4.0	522	1	36	14310	623	1	13429	547						
	UTAH	1	1	11910	3.7	438	1	7	10080	354									
	OREGON	2	2	13600	3.7	501	1	25	15060	575									
	MAINE	2	2	12050	3.7	450	2	9	12590	448	1	11968	444						
	VERMONT	5	5	10894	3.8	412	4	20	11648	432	1	11838	441						
	MASSACHUSETTS	5	5	10268	3.9	393	5	12	10264	403	1	11011	410						
	CONNECTICUT	2	2	12655	4.1	510	2	8	11520	454	1	11064	417						
	NEW YORK	31	33	12256	3.7	454	30	17	13502	485	1	13539	489						
	NEW JERSEY	4	4	12603	3.7	455	4	13	13943	515	1	14353	511						
	PENNSYLVANIA	31	35	11960	3.8	457	31	15	11912	452	1	12787	483						
	OHIO	4	4	13690	3.6	492	4	20	12753	464	1	14502	518						
	INDIANA	6	7	12373	3.9	486	6	7	12024	452	1	13037	480						
	ILLINOIS	9	10	11094	3.8	426	8	13	11788	450	1	10937	430						
	MICHIGAN	7	8	12234	3.8	455	7	26	11958	439	1	11744	432						
	WISCONSIN	8	9	11939	3.6	425	8	15	12022	448	1	12432	458						
	MINNESOTA	4	4	12488	3.6	449	4	21	13680	504	1	14134	513						
	IOWA	8	8	12459	3.7	464	8	13	13449	498	1	13145	481						
	MISSOURI	2	2	13140	3.9	520	2	18	10245	424	1	10426	449						
	SOUTH DAKOTA	1	1	11580	4.0	461	1	18	10360	384	1	11619	413						
	DELAWARE	1	1	12100	3.5	422	1	11	12960	457	1	13538	482						
	MARYLAND	7	7	12156	3.7	449	7	16	12383	492	1	11990	456						
	VIRGINIA	5	5	12496	3.7	467	5	30	13754	515	1	14285	527						
	WEST VIRGINIA	1	1	15140	3.2	489	1	36	14320	499	1	14017	500						
	SOUTH CAROLINA	1	1	8000	3.9	315	1	71	8860	331	1	9145	352						
	GEORGIA	1	1	16200	3.8	618	1	35	9820	450	1	10944	470						
	IDAHO	1	2	15275	3.5	530	1	12	13705	442	1	14606	495						
	ARIZONA	1	1	15460	3.4	532	1	49	12220	419	1	9309	300						
	UTAH	3	3	8597	3.5	305	3	6	11630	417									
	WASHINGTON	1	1	15330	3.4	517	1	11	16860	639									
	1157722	VERMONT	1	2	11360	4.2	470	1	63	11620	448	2	11941	454					
		MASSACHUSETTS	1	1	13380	3.4	458	1	16	11490	437	1	11718	440					
		CONNECTICUT	1	1	10980	3.3	360	1	3	9430	319	1	9134	326					
		NEW YORK	15	17	11967	3.6	425	14	19	12734	461	1	13039	468					
		NEW JERSEY	2	3	13070	3.4	444	2	26	14258	518	2	13797	508					
		PENNSYLVANIA	28	43	11066	3.7	409	26	13	11392	431	1	11877	450					
		OHIO	10	11	12511	3.6	450	9	12	12839	468	1	13146	481					
		INDIANA	8	8	11448	3.7	424	5	5	13060	497	1	12729	480					
		ILLINOIS	8	9	13701	3.5	477	7	15	12609	447	1	12237	442					
		MICHIGAN	5	5	13292	3.5	466	5	14	11478	418	1	13170	481					
	WISCONSIN	9	11	13051	3.5	454	8	15	12964	457	1	13323	477						
	MINNESOTA	3	4	11080	3.7	404	2	6	11818	426	2	11636	425						
	VIRGINIA	1	1	14290	3.6	515	1	32	12480	462	1	12535	511						
	KENTUCKY	1	1	9350	3.6	336	1	11	10380	395	1	10028	414						
1164014	MASSACHUSETTS	1	1	12870	4.2	542													
	CONNECTICUT	2	2	11315	4.2	470	2	18	9610	367	1	9276	351						
	NEW YORK	3	3	12090	4.0	487	3	10	11807	438	1	11516	418						
	NEW JERSEY	1	1	10390	3.6	373													
	PENNSYLVANIA	10	13	13145	4.0	519	10	10	12826	491	1	12871	488						
	OHIO	2	2	16185	3.8	623	1	42	13930	491	1	13603	461						
	INDIANA	3	3	13363	4.0	529	3	11	11130	409	1	12637	450						
	ILLINOIS	4	6	12218	3.8	463	4	12	11823	431	1	11576	430						
	MICHIGAN	3	4	11928	3.9	462	3	18	13320	486	2	13462	491						
	WISCONSIN	8	9	13933	3.8	528	8	20	13076	472	1	13240	486						
	MINNESOTA	2	2	11505	3.7	423	2	9	11465	400	1	11456	386						
	IOWA	6	12	14261	3.9	553	1	41	14030	487									
	MARYLAND	2	2	12895	3.8	496	2	14	12585	467	1	10192	388						
	VIRGINIA	1	1	11290	3.6	406	1	12	11850	412	1	11870	427						
1164018	MAINE	1	1	8760	4.3	381	1	14	15930	612	1	16219	606						
	VERMONT	2	2	13525	3.7	487	2	16	11770	420	1	12296	446						
	MASSACHUSETTS	1	1	14310	3.5	505	1	15	14100	519	1	13821	508						
	NEW YORK	15	18	12205	3.7	454	14	21	12477	446	1	12428	445						
	NEW JERSEY	5	7	12890	3.7	483	4	13	11260	413	1	11336	417						
	PENNSYLVANIA	26	39	10516	3.7	393	26	12	11730	436	1	11816	435						
	OHIO	7	8	14509	3.8	547	6	18	13320	494	1	12541	466						
	INDIANA	2	2	12350	3.6	441	2	5	12205	457	1	12655	475						
	ILLINOIS	4	7	12417	3.7	454	3	14	12153	445	2	13059	503						
	MICHIGAN	6	7	9981	3.9	394	6	25	12652	470	1	12033	439						
	WISCONSIN	7	8	12034	3.7	438	7	11	12191	440	1	12179	431						
	MINNESOTA	5	5	11130	3.5	391	4	22	12080	428	1	12895	453						
	IOWA	4	4	14835	3.7	547	3	13	13010	479	1	13489	481						
	MARYLAND	4	5	9440	3.6	338	4	22	11885	463	1	12135	471						
	VIRGINIA	2	2	11930	3.4	420	2	35	10715	384	1	12802	458						
	ALABAMA	1	3	12397	3.8	467	1	11	10535	390	1	9200	349						
	COLORADO	1	1	14130	3.7	525	1	22	12760	484									
	UTAH	1	1	12840	3.9	504	1	21	14920	558									
1164021	ILLINOIS	1	1	9890	3.5	347	1	9	9930	364									

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY RECORDS NO.	AV. MILK LB.	FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
1170910	MAINE		1	1	9050	3.5	319	1	5	11040	407	1	11990	446
	VERMONT		3	3	12207	3.8	460	3	26	12730	482	1	13436	496
	MASSACHUSETTS		6	7	9436	3.8	360	6	15	11578	422	1	11517	427
	CONNECTICUT		11	13	13127	3.7	490	11	16	12615	489	1	13013	493
	NEW YORK		41	45	12373	3.7	451	40	21	13445	484	1	13587	493
	NEW JERSEY		7	8	11914	3.7	445	7	15	12348	454	1	12074	445
	PENNSYLVANIA		69	83	12239	3.8	460	68	14	11826	443	1	12189	456
	OHIO		10	12	13210	3.7	481	10	18	12621	455	1	12816	456
	INDIANA		10	10	13553	3.8	512	7	9	13517	513	1	13575	496
	ILLINOIS		21	25	12069	3.8	460	21	17	11852	450	1	12135	455
	MICHIGAN		7	8	12989	3.7	474	7	18	11870	436	1	13037	468
	WISCONSIN		17	18	12677	3.7	471	17	12	12941	476	1	12655	465
	MINNESOTA		7	8	12134	3.7	452	6	19	12343	467	1	12858	475
	IOWA		4	6	11528	3.6	407	4	11	12800	458	2	10175	413
	MISSOURI		1	1	9820	3.6	355							
	NEBRASKA		1	1	14460	3.7	538	1	34	14870	536	1	14377	519
	DELAWARE		1	1	12860	3.3	431	1	15	13130	480	1	13571	489
	MARYLAND		4	5	13139	3.6	467	4	21	11351	444	1	12038	458
	VIRGINIA		2	2	15540	3.6	552	2	35	13460	497	1	14453	530
	KENTUCKY		1	1	8410	3.8	321	1	11	8820	328	1	9636	338
	TEXAS		1	1	17700	3.8	678	1	12	15780	592			
	IDAHO		1	2	14980	3.6	537	1	5	12155	466	2	9788	414
	UTAH		2	2	14370	3.6	523	2	21	13245	497			
	WASHINGTON		2	2	10940	3.7	400	1	8	13070	466	1	12622	461
	OREGON		1	1	15080	3.9	586							
1175466	NEW HAMPSHIRE		1	1	12770	3.4	431							
	MASSACHUSETTS		2	3	11783	4.0	470	2	13	11108	410	2	11140	420
	NEW YORK		4	4	12558	3.6	446	3	10	11693	421	1	12633	456
	NEW JERSEY		1	2	11680	3.6	421	1	3	9810	358	2	15484	551
	PENNSYLVANIA		22	30	10162	3.7	377	22	19	11201	424	1	11896	456
	OHIO		2	2	11765	3.4	394	1	16	10640	409	1	12034	431
	INDIANA		2	4	13513	3.7	494	2	7	12715	475	2	12832	461
	ILLINOIS		4	6	13495	3.5	466	4	11	12199	458	1	10966	418
	MICHIGAN		9	15	12231	3.8	458	9	13	10753	412	1	11220	432
	WISCONSIN		6	6	11712	3.5	400	6	16	12162	439	1	12563	461
	MINNESOTA		2	2	11020	3.4	370	2	29	14055	508	1	13091	483
	MISSOURI		2	3	14033	3.7	519	2	27	12618	496	1	10072	426
	TEXAS		1	1	12710	3.6	461							
1175467	VERMONT		1	1	13420	3.6	483	1	63	11430	446	1	11576	447
	MASSACHUSETTS		1	2	10495	3.6	375	1	24	11565	420	2	11407	420
	CONNECTICUT		1	2	10395	3.6	370	1	13	13915	492	2	13484	494
	NEW YORK		22	30	13734	3.7	502	21	17	13569	499	1	13544	495
	NEW JERSEY		3	3	12170	3.6	442	2	12	12450	452	1	14143	495
	PENNSYLVANIA		39	55	13347	3.8	507	39	13	12180	457	1	12712	474
	OHIO		7	9	13078	3.9	510	7	17	12495	457	1	11875	431
	INDIANA		3	3	12067	3.6	435	3	7	13313	489	1	13734	505
	ILLINOIS		19	22	12955	3.9	497	18	13	12517	474	1	12120	454
	MICHIGAN		9	14	13051	3.7	481	9	26	12234	459	1	13214	484
	WISCONSIN		12	14	13131	3.7	489	12	8	12355	459	1	12530	460
	MINNESOTA		8	9	12441	3.7	454	8	15	12317	448	1	11858	428
	IOWA		1	1	12570	3.8	475	1	6	12000	469			
	MISSOURI		3	5	12542	4.0	498	3	9	12457	499	1	9981	451
	MARYLAND		6	8	13088	3.8	503	6	19	12532	476	1	12615	486
	VIRGINIA		4	4	13615	3.7	501	4	28	11980	442	1	12813	464
	WEST VIRGINIA		1	3	16593	3.7	616	1	13	13165	495	2	12677	466
	NORTH CAROLINA		1	1	10470	4.2	443	1	58	9210	363	1	9865	387
	SOUTH CAROLINA		1	1	17590	3.6	638	1	34	8300	336			
	IDAHO		1	1	14810	3.8	570	1	24	9330	359	1	9810	374
	COLORADO		1	1	15090	3.8	572	1	20	15230	547			
1179373	CONNECTICUT		1	1	8200	3.1	255	1	1	13810	541	1	14584	535
	NEW YORK		6	6	12662	3.7	468	6	13	13915	515	1	13651	498
	PENNSYLVANIA		7	7	13164	3.6	470	7	14	12677	475	1	13263	490
	INDIANA		1	1	15000	3.8	566	1	8	15170	608	1	14900	574
	ILLINOIS		1	1	16820	3.6	609	1	7	10540	393			
	WISCONSIN		1	1	10640	3.3	347	1	6	11140	380	1	12797	440
	MINNESOTA		1	1	9520	3.8	358	1	17	12390	456	1	11521	422
	IOWA		1	1	15630	4.0	618	1	16	12940	479	1	13429	459
	DELAWARE		1	1	17320	3.6	624	1	8	14680	522	1	14682	530
	VIRGINIA		1	1	11380	3.2	365	1	26	11840	443	1	12688	460
1179574	MAINE		1	1	9340	3.7	345	1	5	12160	436	1	10061	368
	NEW HAMPSHIRE		2	3	12078	4.0	482	2	11	14015	529	2	14443	529
	VERMONT		9	12	12498	3.8	476	9	20	13251	491	1	13248	490
	MASSACHUSETTS		3	4	10472	3.9	413	3	11	11345	416	1	11783	442
	CONNECTICUT		7	7	15561	3.8	587	7	18	14133	549	1	14393	537
	NEW YORK		41	53	12605	3.8	478	34	22	13435	483	1	13262	481
	NEW JERSEY		3	3	11413	3.8	436	3	32	12633	465	1	12172	450
	PENNSYLVANIA		96	155	11740	4.0	462	93	14	11808	443	2	12332	462
	OHIO		27	33	11954	3.7	448	25	10	12580	448	1	12628	448
	INDIANA		15	18	12482	3.9	484	13	5	13053	476	1	13555	501
	ILLINOIS		21	30	12388	3.9	479	19	14	13218	499	1	12971	478
	MICHIGAN		22	26	11677	3.8	449	18	24	12484	455	1	13307	491

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERO		
								NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		WISCONSIN	16	21	12677	4.0	504	16	12	13635	498	1	13255	491
		MINNESOTA	10	15	12621	3.7	462	10	15	12081	423	1	11612	413
		IOWA	2	2	10200	3.7	376	2	17	13020	468	1	13353	476
		MISSOURI	1	1	13280	4.0	532	1	49	14310	536	1	15554	594
		SOUTH DAKOTA	1	1	15300	3.8	580	1	7	13960	451	1	14421	500
		MARYLAND	9	11	10917	4.1	445	9	17	10479	398	1	11090	426
		VIRGINIA	1	1	9030	3.9	355	1	29	11840	442	1	12688	460
		WEST VIRGINIA	1	1	10530	4.3	452	1	15	13230	501	1	13680	526
		TEXAS	1	1	13850	3.6	500	1	16	12820	455	1	12600	483
		ARIZONA	1	1	9930	3.8	379	1	100	12110	431	1	13527	482
		UTAH	3	4	10350	3.9	407	3	16	12007	442			
1179575		VERMONT	3	3	12593	3.5	442	3	34	12087	454	1	12008	447
		MASSACHUSETTS	2	3	11610	3.8	440	2	14	11088	421	2	11137	428
		RHODE ISLAND	1	1	14960	3.7	553	1	2	11250	421	1	12143	456
		CONNECTICUT	2	2	12845	3.6	463	1	7	8960	360	1	9134	326
		NEW YORK	16	17	11466	3.5	402	14	20	13188	496	1	13030	477
		NEW JERSEY	4	5	8739	3.7	320	1	17	14640	547	1	11401	419
		PENNSYLVANIA	53	69	11224	3.6	407	53	15	11488	431	1	11936	449
		OHIO	5	7	13222	3.5	462	4	9	12218	441	1	12969	464
		INDIANA	7	7	11297	3.8	424	6	6	12867	486	1	12670	478
		ILLINOIS	11	15	12615	3.6	450	11	13	13257	492	1	12951	481
		MICHIGAN	13	16	11430	3.6	409	13	18	11837	440	1	12670	464
		WISCONSIN	14	16	13219	3.6	478	13	17	13624	498	1	13091	482
		MINNESOTA	8	11	12448	3.6	449	8	14	13903	497	1	13145	485
		IOWA	2	3	11555	3.8	436	2	9	12675	467	2	14170	502
		SOUTH DAKOTA	2	3	13990	3.4	468	2	12	13575	459			
		MARYLAND	4	4	12775	3.6	452	4	17	12510	465	1	14119	523
		VIRGINIA	4	6	10466	3.6	372	4	15	10900	392	2	10366	374
		NORTH CAROLINA	1	1	11450	3.4	393	1	31	14780	540	1	15925	577
		SOUTH CAROLINA	2	2	11025	3.4	375	2	56	11625	431	1	11740	438
		GEORGIA	1	1	12880	3.4	444	1	23	13030	450	1	12513	429
		WASHINGTON	1	1	17460	3.3	569	1	60	15030	548			
1182714		OHIO	1	2	12400	4.0	495	1	5	12085	445	2	11756	416
		ILLINOIS	1	4	8783	3.8	333	1	7	12833	498	3	12150	460
		WISCONSIN	1	2	15395	3.8	589	1	12	13275	472	2	12873	468
1184848		MAINE	1	1	13940	3.8	533	1	9	14560	525	1	12066	462
		VERMONT	6	7	11312	4.1	460	6	23	12797	480	1	13642	506
		MASSACHUSETTS	2	2	10370	4.3	453	2	8	11125	422	1	10241	401
		NEW YORK	28	34	13541	3.8	511	27	21	13219	483	1	13651	505
		NEW JERSEY	2	2	13795	3.9	536	2	15	14500	529	1	12437	452
		PENNSYLVANIA	46	60	11712	3.9	457	45	13	11246	423	1	12323	463
		OHIO	6	6	13308	4.0	528	6	18	12773	470	1	12666	446
		INDIANA	2	2	14900	3.8	562	1	3	13160	471	1	12491	479
		ILLINOIS	12	15	12770	3.9	499	11	14	12459	467	1	11665	445
		MICHIGAN	14	15	12009	3.9	463	14	17	12335	461	1	12940	481
		WISCONSIN	7	8	14436	4.0	563	7	11	13169	476	1	12797	470
		MINNESOTA	6	7	12866	4.1	522	6	18	13683	514	1	13760	518
		IOWA	5	6	16768	3.7	625	4	13	12533	469	1	11052	464
		MISSOURI	2	2	13430	3.8	508	2	13	11570	461	1	12448	440
		DELAWARE	2	2	14765	3.9	563	2	16	13035	464	1	13516	475
		MARYLAND	3	3	11587	3.8	434	3	10	11710	427	1	12295	449
		VIRGINIA	1	1	14120	3.6	509	1	31	9080	310	1	11151	386
		UTAH	3	3	14147	3.9	548	3	10	12117	433			
1190151		MAINE	3	4	11855	4.0	478	3	28	10598	407	1	10793	413
		VERMONT	11	11	12175	3.7	451	11	30	13279	497	1	13464	500
		MASSACHUSETTS	4	4	11053	3.7	405	4	6	10940	435	1	10700	404
		CONNECTICUT	2	2	13895	3.7	516	2	13	13830	508	1	13936	521
		NEW YORK	38	40	13312	3.7	494	38	22	13258	480	1	13357	483
		NEW JERSEY	4	5	9596	3.7	354	4	19	11854	427	1	11331	409
		PENNSYLVANIA	40	49	11825	3.8	452	39	12	12502	468	1	12579	475
		OHIO	4	4	10845	3.6	389	4	25	12458	439	1	13342	454
		INDIANA	6	6	13435	3.8	499	6	11	13927	532	1	14344	518
		ILLINOIS	19	25	12297	3.9	480	16	17	12422	458	1	13408	499
		MICHIGAN	14	14	13794	3.7	509	14	19	12751	467	1	13253	491
		WISCONSIN	10	10	11848	3.8	448	10	10	12135	448	1	12775	466
		MINNESOTA	4	5	11690	3.8	446	4	15	12055	455	1	11191	411
		IOWA	2	2	12620	3.5	446	2	15	14825	527	1	14219	505
		MISSOURI	1	1	14400	3.9	559	1	26	13120	509			
		NEBRASKA	1	2	13885	4.0	550	1	21	12010	455	1	12230	464
		VIRGINIA	2	2	12660	4.0	492	2	26	12630	473	1	12829	487
		WEST VIRGINIA	1	1	14920	3.7	550	1	32	13960	494	1	14017	500
		GEORGIA	1	1	15290	3.7	563	1	4	13850	502	1	12328	470
		UTAH	1	1	15590	3.6	559	1	6	15950	577			
1192779		MASSACHUSETTS	1	1	19180	3.4	647	1	14	14970	629	1	14366	633
		CONNECTICUT	1	1	7810	3.6	279	1	23	8120	308	1	7881	291
		NEW YORK	10	14	13434	3.6	485	10	21	12768	471	1	12551	470
		NEW JERSEY	1	1	17080	3.3	557	1	6	14780	506	1	13494	481
		PENNSYLVANIA	28	34	11755	3.7	438	28	15	11091	420	1	11741	443
		OHIO	4	4	10680	3.7	380	3	7	12247	434	1	12502	430
		INDIANA	3	4	11953	3.7	436	3	9	11513	442	1	12553	486

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				AV. RECORDS	MILK LB.	FAT LB.
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.			
		ILLINOIS	5	5	13062	3.7	487	5	12	12710	475	1	12241	448
		MICHIGAN	4	6	14298	3.5	497	3	18	12853	471	2	13033	481
		WISCONSIN	13	15	12827	3.5	440	12	9	11544	414	1	12309	453
		MINNESOTA	1	1	10310	3.6	366	1	6	11640	406	1	11870	407
		IOWA	1	1	13020	3.3	433	1	6	10560	379			
		MISSOURI	1	1	11930	3.7	439	1	49	14340	538	1	15554	594
		NEBRASKA	1	1	12120	3.6	442	1	19	12100	457			
		MARYLAND	2	3	16413	4.0	653	2	15	13255	517	1	13652	539
		VIRGINIA	1	1	16200	3.9	627	1	40	15040	547	1	15413	562
		TEXAS	1	1	9280	4.0	374	1	27	13170	495	1	12590	473
	1192784	NEW HAMPSHIRE	1	1	15110	3.8	571	1	41	13520	511	1	14421	546
		VERMONT	1	2	15360	3.7	553					1	13745	494
		NEW YORK	2	2	11980	3.6	426	1	5	11460	405	1	11151	420
		PENNSYLVANIA	3	5	9692	3.6	352	3	10	11323	418	2	12490	462
		INDIANA	3	4	15817	3.3	519	2	9	12718	475	1	13738	494
		ILLINOIS	2	4	15097	3.7	552	2	10	13554	528	2	13006	506
		WISCONSIN	4	5	13365	3.5	460	4	14	12311	428	1	11607	407
		MINNESOTA	1	2	15455	3.5	534	1	10	10920	410	1	11663	427
	1192789	VERMONT	1	1	12870	3.8	489	1	8	11520	417	1	12077	436
		MASSACHUSETTS	1	1	11300	4.5	509	1	20	15350	569	1	15947	602
		NEW YORK	4	4	11513	3.9	440	4	11	13545	499	1	13203	490
		PENNSYLVANIA	8	8	8036	4.2	336	8	12	11350	421	1	12339	452
		INDIANA	1	1	12350	4.1	512	1	4	16170	597	1	13810	506
		ILLINOIS	1	1	10020	4.2	422	1	2	12760	265	1	12012	465
		MICHIGAN	2	2	11895	4.1	489	2	7	10385	397	1	12862	471
		MINNESOTA	1	1	19890	3.3	653	1	4	17290	591			
		MARYLAND	2	2	13495	3.8	500	2	13	13390	475	1	15794	561
	1192946	VERMONT	1	1	7420	3.4	253	1	63	11520	450	1	11576	447
		CONNECTICUT	1	1	15370	3.5	545							
		NEW YORK	3	3	10227	3.7	373	3	6	11543	421	1	12781	479
		PENNSYLVANIA	6	8	9537	3.9	364	6	14	11470	426	1	11433	425
		ILLINOIS	10	14	14716	3.6	541	9	30	13177	466	1	13241	496
		WISCONSIN	2	2	15705	3.3	513	2	20	14315	510	1	13538	531
		SOUTH CAROLINA	1	1	5570	4.0	220	1	57	8310	290	1	8742	318
	1193934	VERMONT	1	1	9610	3.6	349	1	4	10460	384	1	11641	477
		MASSACHUSETTS	1	1	10980	3.7	407	1	10	9370	368	1	9123	372
		CONNECTICUT	2	2	13050	3.5	457	2	11	14710	537	1	14269	522
		NEW YORK	13	16	13108	3.5	455	13	24	12976	458	1	13027	464
		NEW JERSEY	5	7	13400	3.6	482	5	19	12923	488	1	13055	484
		PENNSYLVANIA	28	34	13085	3.6	471	28	15	11524	425	1	12270	454
		OHIO	3	3	10587	3.6	367	2	15	13920	489	1	13674	465
		INDIANA	2	3	16160	3.8	612	2	7	12578	474	1	14366	534
		ILLINOIS	3	3	13487	3.5	472	3	17	11980	454	1	13097	477
		MICHIGAN	3	3	13820	3.4	483	3	15	11940	430	1	14285	518
		WISCONSIN	6	6	14393	3.5	494	6	15	13053	464	1	12725	449
		MINNESOTA	1	1	11840	3.8	449	1	1	11690	356	1	15293	568
		IOWA	1	1	15120	3.3	503	1	4	11920	383	1	12644	440
		DELAWARE	1	1	13390	3.6	489	1	21	10540	397	1	11314	414
		MARYLAND	3	3	10060	3.3	345	3	14	10867	389	1	11707	417
		VIRGINIA	1	1	13060	3.8	495	1	6	10710	393			
		NORTH CAROLINA	1	1	12790	3.5	451	1	10	11980	414	1	10061	373
		UTAH	1	1	5000	3.7	184	1	2	11420	459			
	1194165	VERMONT	2	2	16360	4.2	693	2	67	13700	559	1	13587	555
		PENNSYLVANIA	2	3	12020	3.9	466	2	19	11355	417	2	12900	458
		INDIANA	1	2	12925	3.9	503					1	12219	449
		WISCONSIN	1	1	12010	4.0	485	1	14	14210	518	1	13647	493
		MISSOURI	1	1	13330	3.8	503	1	15	13530	473	1	14083	516
		NEBRASKA	2	3	13130	4.1	536	2	26	12640	465	1	13701	523
	1194166	VERMONT	2	2	14605	4.2	614	2	45	13225	517	1	13532	529
		MASSACHUSETTS	4	5	13309	4.4	576	4	15	14323	564	1	14067	549
		CONNECTICUT	2	3	14498	3.8	545	2	7	14755	537	2	16879	629
		NEW YORK	15	19	12454	3.8	468	14	20	12804	462	1	12470	452
		NEW JERSEY	3	4	11812	3.6	420	3	21	11202	405	1	11236	408
		PENNSYLVANIA	22	32	11148	4.0	446	22	15	11717	446	1	12270	470
		OHIO	2	2	12190	4.4	531	2	12	13585	518	1	12993	465
		INDIANA	2	3	15048	4.0	588	2	10	13668	479	2	13522	491
		ILLINOIS	8	11	12121	4.2	502	5	15	13774	528	1	12431	471
		MICHIGAN	2	3	12178	4.2	512	2	15	12155	453	2	11963	447
		WISCONSIN	7	10	12452	3.9	477	7	10	11377	410	1	11834	426
		MINNESOTA	2	5	10634	4.0	427	2	16	11280	402	3	8146	421
		IOWA	4	10	14246	4.0	565	4	12	12736	458	3	11927	470
		MARYLAND	1	2	12335	4.0	491	1	23	10940	383	2	11217	401
		VIRGINIA	2	3	11583	4.4	506	2	15	12885	456	2	12584	473
	1200288	NEW YORK	11	13	12468	4.0	497	11	14	13098	494	1	13267	502
		PENNSYLVANIA	16	22	11035	3.9	429	15	13	11298	420	1	11800	442
		OHIO	4	4	12260	3.8	442	4	12	12558	438	1	12215	413
		INDIANA	3	3	14613	3.6	528	3	3	14380	546	1	12584	478
		MICHIGAN	1	2	13855	3.9	532	1	2	14890	532	2	13440	491

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		WISCONSIN	4	4	13465	3.6	491	4	11	12975	475	1	12977	461
		MINNESOTA	1	1	12150	4.1	502	1	18	11430	429	1	10933	391
		IOWA	2	5	14042	3.8	529	2	22	12043	430	3	10662	454
		DELAWARE	1	1	14430	3.6	513	1	11	12740	449	1	13429	479
		MARYLAND	2	3	11810	3.8	447	2	18	12443	457	2	13835	503
		COLORADO	1	1	13700	3.7	512	1	4	10860	463	1	11031	425
1200289		PENNSYLVANIA	1	1	9330	4.3	406	1	47	10340	405			
1202275		CONNECTICUT	1	1	11670	4.8	557	1	12	13490	512	1	13483	521
		NEW YORK	4	4	11720	3.9	463	4	18	13338	497	1	13535	501
		NEW JERSEY	2	2	12960	3.7	487	2	19	14870	540	1	14470	519
		PENNSYLVANIA	11	11	11061	3.9	429	11	10	12697	467	1	12505	474
		MICHIGAN	1	1	8510	4.4	374					1	12197	429
		MINNESOTA	1	1	11930	4.7	566	1	1	14970	586			
		VIRGINIA	1	1	10150	3.5	352	1	1	12070	429	1	15413	521
1210078		MICHIGAN	1	1	13450	4.1	550	1	2	12750	456	1	15402	573
1210295		PENNSYLVANIA	2	2	14580	3.7	535	2	11	13020	508	1	12851	499
		INDIANA	1	1	5840	3.5	205					1	10856	426
		MICHIGAN	1	1	15310	3.6	553	1	24	13470	496	1	14802	519
		WISCONSIN	2	2	15490	3.5	536	2	8	12505	435	1	13783	489
		MINNESOTA	1	1	17750	4.0	711	1	29	14760	555	1	14759	576
		MARYLAND	1	1	9580	3.5	338	1	16	11160	425			
1215686		NEW YORK	1	2	14425	4.2	601	1	52	15790	549	1	15740	534
		INDIANA	1	2	10705	3.9	413	1	3	11220	437	2	9701	372
		ILLINOIS	2	3	12530	4.2	516	2	29	13233	491	1	14508	534
		MICHIGAN	1	2	7060	4.0	276	1	7	11100	390	2	11178	392
1215687		MASSACHUSETTS	1	1	8900	3.7	328	1	13	11620	448	1	11728	445
		PENNSYLVANIA	3	3	14263	3.2	455	3	25	11060	408	1	12273	453
		INDIANA	1	1	10580	3.5	375	1	3	15320	547	1	12491	479
		MINNESOTA	1	1	10800	3.5	383	1	26	14740	543	1	14497	532
1216908		VERMONT	1	1	10610	4.0	426	1	1	9000	336	1	12982	481
		CONNECTICUT	1	1	5180	3.6	189					1	13353	498
		NEW YORK	1	1	14380	3.8	548	1	11	12690	460	1	12110	439
		PENNSYLVANIA	1	1	10650	3.3	348	1	19	9560	341	1	8480	295
		OHIO	1	1	10060	3.1	310	1	21	11170	346	1	11129	344
		ILLINOIS	2	2	12610	3.5	432	2	8	12635	471			
		KENTUCKY	1	1	12280	3.6	437	1	6	9310	304	1	10976	393
1216909		MAINE	2	2	11035	4.2	461	2	23	11255	440	1	11418	431
		NEW HAMPSHIRE	1	1	8350	4.4	367	1	21	8960	345	1	7717	295
		VERMONT	2	3	10850	3.4	370	2	14	11415	417	1	12851	457
		MASSACHUSETTS	2	2	7120	4.2	298	2	10	6350	278	1	9963	405
		RHODE ISLAND	1	1	12980	3.8	491	1	9	13050	550	1	12611	541
		CONNECTICUT	1	1	11440	3.8	432	1	13	13830	488	1	14279	529
		NEW YORK	7	7	11697	3.4	403	7	11	12391	438	1	12306	423
		NEW JERSEY	1	1	9060	4.3	387	1	42	11870	423	1	11805	433
		PENNSYLVANIA	23	26	12449	3.8	475	23	15	11835	451	1	12309	463
		OHIO	5	5	14528	3.6	528	5	10	12112	447	1	12816	476
		INDIANA	5	5	12360	3.8	460	3	4	14400	520	1	13080	505
		ILLINOIS	6	6	11443	4.0	460	6	13	12012	450	1	9797	373
		MICHIGAN	6	8	12825	3.9	493	6	26	13089	483	1	14275	526
		WISCONSIN	2	2	17255	3.4	578	2	29	14285	502	1	15369	554
		MINNESOTA	4	4	11028	4.0	440	4	12	13498	491	1	13048	454
		MISSOURI	1	2	10850	3.7	404	1	40	12990	470	2	13364	478
		NORTH DAKOTA	1	1	13530	3.5	468	1	62	12150	449	1	11990	434
		SOUTH DAKOTA	1	1	8540	3.6	307	1	18	10530	392	1	11183	400
		NEBRASKA	1	1	15540	4.0	618	1	21	12530	449	1	12415	451
		KANSAS	1	1	11520	4.0	466	1	69	12540	476	1	12524	460
		MARYLAND	3	4	10943	3.4	373	3	16	11597	422	1	11707	416
1216957		MAINE	1	1	12500	4.2	529	1	6	13200	475			
		VERMONT	3	3	9343	4.1	386	3	33	12297	470	1	12633	481
		MASSACHUSETTS	5	5	13770	4.0	546	4	8	13113	494	1	13320	509
		RHODE ISLAND	2	2	13105	3.9	510	2	16	12720	480			
		CONNECTICUT	4	4	15050	4.0	613	4	14	14555	601	1	14358	556
		NEW YORK	56	61	13173	3.8	495	55	20	13340	487	1	13430	494
		NEW JERSEY	7	8	13381	3.8	500	7	26	13008	478	1	12670	459
		PENNSYLVANIA	60	68	11978	3.9	467	59	12	12035	455	1	12688	478
		OHIO	9	11	11218	4.0	451	9	23	11989	435	1	12124	428
		INDIANA	13	14	12428	3.9	482	13	7	12611	472	1	12671	468
		ILLINOIS	28	32	12709	3.9	495	28	14	12116	457	1	12520	468
		MICHIGAN	9	9	10079	3.7	371	8	12	11505	429	1	12780	466
		WISCONSIN	13	13	13257	3.6	477	13	8	15268	481	1	12620	446
		MINNESOTA	7	7	13443	3.7	499	7	14	12891	489	1	13542	509
		IOWA	4	5	12976	3.8	498	4	11	14206	512	1	13596	493
		MISSOURI	1	1	11690	4.1	476	1	24	14470	561	1	14126	547
		SOUTH DAKOTA	1	1	15820	3.9	620	1	12	12590	434	1	14421	500
		NEBRASKA	2	2	13310	3.9	510	2	36	13305	499	1	12230	464
		MARYLAND	8	8	13448	3.6	482	8	16	12978	459	1	13359	473

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.			
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	
		VIRGINIA	3	3	13063	3.5	469	3	27	13783	498	1	13127	481	
		NORTH CAROLINA	1	1	10580	3.5	366	1	2	9840	330	1	9886	363	
		COLORADO	1	1	18850	3.4	639	1	26	16670	600	1	13821	528	
		UTAH	3	3	13953	3.8	526	3	17	12357	455				
1224123		MAINE	1	1	11090	3.7	415	1	13	11450	418	1	11020	400	
		VERMONT	1	1	12680	3.8	480	1	19	11100	420	1	13440	509	
		MASSACHUSETTS	1	2	11335	4.6	514	1	31	13030	497	2	12639	488	
		NEW YORK	8	9	10815	3.9	419	8	23	11788	437	1	12090	444	
		NEW JERSEY	1	1	11200	4.4	489	1	6	11720	431	1	12655	467	
		PENNSYLVANIA	27	34	9719	3.9	382	27	15	11774	436	1	11785	443	
		OHIO	7	7	12289	3.7	454	7	14	12771	485	1	12721	471	
		INDIANA	2	2	9970	4.9	484	2	15	11915	455	1	11598	443	
		ILLINOIS	8	9	10540	4.1	435	7	14	12293	468	1	13571	515	
		MICHIGAN	7	8	10374	4.0	420	7	13	12666	474	1	13717	491	
		WISCONSIN	8	9	12197	3.9	470	8	12	13010	481	1	12871	474	
		NORTH DAKOTA	1	1	12440	4.2	526	1	11	15400	591	1	12437	459	
		VIRGINIA	1	1	14990	3.6	541	1	8	13990	540	1	13156	496	
		GEORGIA	1	1	14440	4.4	630	1	35	9870	450	1	10944	470	
1224313		MASSACHUSETTS	3	4	12082	3.6	439	3	16	13045	480	2	12530	486	
		CONNECTICUT	1	1	14090	3.8	533	1	12	11860	442	1	10802	409	
		NEW YORK	29	33	13722	3.6	491	27	19	13465	499	1	13446	494	
		NEW JERSEY	3	3	9353	3.8	356	3	13	10723	410	1	11398	424	
		PENNSYLVANIA	35	46	11721	3.6	426	35	13	11646	445	1	12302	467	
		OHIO	15	16	13415	3.5	470	14	18	12200	442	1	12932	466	
		INDIANA	5	5	12286	3.6	443	5	6	12930	476	1	12276	461	
		ILLINOIS	15	21	14333	3.5	501	15	18	13267	481	1	12649	461	
		MICHIGAN	11	14	13617	3.5	472	11	13	11919	439	1	12353	446	
		WISCONSIN	26	27	13059	3.5	448	26	14	12852	470	1	12264	448	
		MINNESOTA	4	4	13065	3.8	492	4	10	12003	455	1	12352	470	
		IOWA	4	4	12318	3.5	435	4	12	13098	459	1	12996	463	
		MISSOURI	3	5	10963	3.9	423	2	13	14313	555				
		SOUTH DAKOTA	2	3	14130	3.5	504	2	28	13290	448	2	10862	465	
		NEBRASKA	2	3	12893	3.6	466	2	14	12165	467	1	12230	464	
		DELAWARE	1	1	12250	3.5	425	1	11	12370	420	1	12481	435	
		MARYLAND	7	7	13713	3.7	504	6	22	12537	474	1	12991	502	
		VIRGINIA	2	2	13275	3.3	439	2	19	11785	439	1	11560	418	
		SOUTH CAROLINA	1	1	14510	4.2	614	1	77	10210	390	1	9788	378	
		WASHINGTON	1	1	14200	3.0	419	1	13	13090	453	1	13941	489	
		OREGON	1	1	13130	3.7	480	1	6	11050	435	1	11064	461	
1224521		VERMONT	1	1	13940	4.2	581	1	19	12730	471	1	12840	483	
		MASSACHUSETTS	7	7	10951	3.7	409	7	9	11480	421	1	12059	446	
		RHODE ISLAND	1	1	9630	3.7	360	1	2	13910	517	1	12143	456	
		CONNECTICUT	2	2	10200	3.7	379	1	44	12530	456	1	13609	496	
		NEW YORK	10	10	11336	3.6	406	10	11	13095	473	1	13465	493	
		NEW JERSEY	3	3	12090	3.5	422	3	25	12813	468	1	12510	457	
		PENNSYLVANIA	21	21	11452	3.7	418	21	16	12222	455	1	12882	480	
		OHIO	7	7	11876	3.6	428	7	9	11930	447	1	12588	460	
		ILLINOIS	2	2	13765	3.7	492	2	22	12590	456	1	13522	499	
		MICHIGAN	1	1	16600	3.8	639	1	67	14810	517	1	15271	544	
		MINNESOTA	2	2	11025	3.9	428	2	16	12560	447	1	12066	453	
		IOWA	1	1	10990	3.9	423	1	5	13270	458	1	11445	428	
		MARYLAND	5	6	12083	3.6	440	5	16	12784	512	1	12894	467	
		VIRGINIA	2	2	11960	3.9	451	2	20	12215	410	1	13173	470	
		WEST VIRGINIA	1	1	8560	3.0	257	1	2	8620	319				
		UTAH	3	3	12687	3.5	441	3	4	13980	519				
1227623		PENNSYLVANIA	9	10	11695	3.9	454	9	11	11748	444	1	12200	462	
		OHIO	1	1	11290	4.3	480	1	15	13940	490	1	14562	543	
		ILLINOIS	2	2	13095	3.5	456	2	31	13670	481	1	11979	433	
		MICHIGAN	2	3	11485	3.8	431	2	10	10090	365	2	12284	448	
		KENTUCKY	1	1	11340	3.5	402	1	7	13310	458	1	11598	432	
1236249		VERMONT	1	1	14570	3.6	523	1	29	14240	547	1	14225	548	
		CONNECTICUT	1	1	19820	3.8	756	1	6	14470	551	1	16742	626	
		NEW YORK	3	3	11127	3.8	428	3	13	13010	472	1	12252	443	
		PENNSYLVANIA	20	24	10206	3.7	374	20	18	11479	439	1	12127	462	
		OHIO	2	2	14470	3.6	507	2	7	13305	473				
		INDIANA	3	4	9555	3.6	342	2	4	12298	435	2	13942	494	
		ILLINOIS	2	2	11640	3.8	444	2	26	10600	411	1	12344	463	
		MICHIGAN	2	2	10435	4.2	436	1	9	13220	481	1	13157	477	
		WISCONSIN	4	4	13103	3.5	452	3	20	12507	459	1	12884	471	
		MARYLAND	1	1	7070	2.5	174	1	33	10820	379	1	12154	425	
		VIRGINIA	1	1	12250	3.9	478	1	27	13560	528	1	13472	499	
1239208		MAINE	1	1	10470	4.0	417								
		MASSACHUSETTS	2	2	8635	4.0	357	2	28	12655	472	1	12622	470	
		NEW YORK	2	2	11635	3.7	425	2	5	15790	558	1	13985	496	
		PENNSYLVANIA	14	14	10541	4.2	441	13	16	12103	449	1	12759	473	
		OHIO	4	4	12740	3.8	479	4	13	13775	514	1	12887	465	
		INDIANA	1	1	13950	3.7	511	1	7	13480	523	1	14235	524	
		ILLINOIS	4	5	9993	3.9	384	4	19	12550	454	1	12306	454	
		MICHIGAN	2	3	9308	3.9	356	2	6	12530	443	2	12726	455	

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECDROS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	YEARLY HERD RECORDS NO.	MILK LB.	FAT LB.
		SOUTH DAKOTA	1	1	13540	4.1	558							
		MARYLAND	1	1	10870	3.3	362	1	24	11230	427	1	11979	438
	1239209	ILLINOIS	2	2	14085	3.8	539	2	93	14150	524	1	14464	530
	1240095	VERMONT	3	4	12418	3.7	449	3	30	12377	447	1	12886	471
		NEW YORK	5	5	12696	3.4	432	5	11	13440	496	1	13985	520
		PENNSYLVANIA	13	13	10791	3.5	384	12	14	11108	406	1	12137	448
		OHIO	1	2	9995	4.0	394	1	11	11330	437	1	12252	470
		INDIANA	1	1	14110	3.5	499	1	10	14160	565	1	14900	574
		MICHIGAN	4	4	10583	3.7	390	4	10	10795	390	1	12651	470
		WISCONSIN	1	2	9525	3.9	366	1	16	8825	332	2	12105	448
		MINNESOTA	1	1	9930	3.9	389	1	13	14000	495	1	13908	499
		MARYLAND	3	3	14543	3.5	509	3	20	12970	498	1	14437	556
		VIRGINIA	1	1	10420	3.8	396	1	6	11150	409			
		COLORADO	2	2	15040	3.3	500					1	12252	453
	1246450	VERMONT	2	2	11105	4.0	445	2	62	11470	447	1	11647	449
		MASSACHUSETTS	1	1	11310	4.2	475	1	4	12060	455	1	13145	500
		CONNECTICUT	2	2	8730	3.0	312	2	18	10580	416	1	11941	465
		NEW YORK	11	13	11862	3.6	427	11	21	13625	500	1	13920	496
		PENNSYLVANIA	16	19	10223	3.8	390	16	17	11302	429	1	12230	461
		OHIO	2	2	13710	3.5	478	2	28	12475	523	1	11663	456
		INDIANA	3	3	14003	3.7	509	2	7	11910	481	1	13164	493
		ILLINOIS	20	22	12426	3.8	466	20	21	12716	470	1	12086	457
		MICHIGAN	3	3	11820	3.6	421	3	18	12410	453	1	13454	493
		WISCONSIN	1	1	14690	3.7	550	1	5	11180	434	1	11173	414
		MINNESOTA	1	1	11500	3.3	383	1	8	14100	538			
		IOWA	2	4	16527	3.6	587	2	14	15458	555	2	13117	564
		VIRGINIA	3	3	11723	3.7	436	3	27	11710	434	1	12698	461
	1249434	MAINE	1	1	14640	3.4	491	1	4	14520	515	1	12066	462
		NEW YORK	2	2	13320	3.7	486	2	5	10190	381	1	12917	486
		PENNSYLVANIA	1	1	9490	4.2	403	1	10	11250	444	1	12720	507
		MICHIGAN	1	1	13460	3.5	470	1	13	11740	432	1	10813	390
		UTAH	1	1	17220	3.3	573	1	1	18090	616			
		WASHINGTON	1	1	8860	4.3	377	1	3	10890	395	1	13876	510
	1264447	VERMONT	1	1	8430	3.9	328	1	15	9280	368	1	10420	403
		MASSACHUSETTS	1	1	10270	3.5	356	1	9	11640	443	1	11739	445
		NEW YORK	13	13	11760	3.9	462	12	17	12891	483	1	13027	473
		NEW JERSEY	2	2	11905	3.6	430	2	12	12770	473	1	13952	497
		PENNSYLVANIA	16	17	10953	4.0	434	16	14	11380	425	1	12523	474
		ILLINOIS	12	12	11238	3.9	439	11	15	12119	452	1	12463	476
		MICHIGAN	5	6	14131	3.5	495	5	15	14471	530	1	14724	531
		WISCONSIN	5	5	12212	3.6	442	5	9	12158	443	1	12059	453
		MINNESOTA	5	6	12896	3.7	471	5	19	12398	483	2	9930	474
		IOWA	1	1	7460	4.2	315	1	15	10940	389			
		MISSOURI	1	1	15800	4.0	626	1	6	8040	286	1	9091	324
		DELAWARE	1	1	10640	4.1	439	1	12	13800	526	1	14573	567
		MARYLAND	2	2	10570	3.9	405	2	17	13150	483	1	12377	451
		VIRGINIA	2	2	8765	4.0	350	2	32	13635	499	1	13854	509
	1269686	MASSACHUSETTS	2	2	12855	3.8	477	2	16	13365	538	1	14187	574
		PENNSYLVANIA	3	3	12333	3.7	459	3	17	11927	451	1	12898	492
		OHIO	1	1	13910	3.6	506	1	10	11690	424			
		ILLINOIS	1	1	9910	4.1	402	1	3	11950	403			
		DELAWARE	1	1	13100	3.8	501	1	11	12860	450	1	13429	479
		ARIZONA	1	1	15250	3.7	557	1	55	14000	491	1	12350	464
	1276894	NEW YORK	1	1	9700	3.3	321	1	24	15730	588	1	11521	415
		NEW JERSEY	1	1	13210	3.7	482	1	33	12900	476	1	12372	463
		PENNSYLVANIA	4	4	11900	3.7	426	4	18	13493	499	1	14222	519
		ILLINOIS	1	1	11480	3.8	432	1	12	11220	417			
	1278353	PENNSYLVANIA	1	1	12910	4.4	566	1	17	12860	503	1	12753	498
		WISCONSIN	1	1	8580	4.0	343					1	14007	507
JER.	493850	PENNSYLVANIA	1	1	3420	5.6	199							
		MICHIGAN	1	1	6560	6.2	407	1	6	6000	339	1	7129	392
	504455	VERMONT	2	4	5369	5.3	284	2	9	7950	380	2	6845	368
		PENNSYLVANIA	3	5	6405	5.6	356	3	11	8897	448	2	8177	412
		OHIO	2	2	7320	5.6	409	2	37	8260	430			
		INDIANA	1	1	7630	5.8	442							
		ILLINOIS	2	4	6992	5.4	378	2	6	7233	396	2	7682	403
		MICHIGAN	1	2	7465	5.7	421					2	8519	463
		WISCONSIN	2	2	5815	5.4	313	1	2	5440	314	1	7728	411
		IDAHO	1	1	6590	5.8	380	1	13	6560	381	1	7052	389
	505057	VERMONT	2	5	7061	5.7	400	2	22	7023	401	3	7817	417
		MASSACHUSETTS	2	3	7775	5.4	415	2	9	8325	438	1	8600	482
		NEW YORK	1	1	5930	5.0	295	1	31	6490	340	1	6431	330
		PENNSYLVANIA	1	1	9640	5.0	483	1	8	7520	354	1	9592	450
		INDIANA	1	1	7480	5.1	333	1	18	7520	384	1	6704	358

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAS.	CONTEMPDARY RECORDS NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
		ILLINDIS	2	2	9475	4.3	403							
		MISSOURI	10	17	6645	5.4	358	4	7	7390	407	2	7490	394
		NEBRASKA	1	1	8270	4.3	359	1	5	7920	412	1	7303	410
		OREGON	2	3	7663	5.6	428	2	22	9205	479	1	8856	459
517080		NEW HAMPSHIRE	3	3	5693	5.2	293	1	10	5790	302	1	6813	356
		VERMONT	5	11	7128	5.1	362	4	54	8486	433	2	8790	454
		NEW YORK	4	7	6907	5.3	367	2	5	6220	324	1	7906	344
		PENNSYLVANIA	1	3	6113	4.4	276							
		ILLINOIS	1	1	6360	4.9	314	1	7	6980	366	1	8709	428
		MICHIGAN	1	1	6840	5.8	394							
		WISCONSIN	5	7	6796	5.2	350	3	13	6830	371	1	8589	507
		IOWA	5	5	8600	5.1	434	5	28	8104	388	1	7044	346
		ALABAMA	1	1	5080	5.3	267							
		WASHINGTON	4	8	8892	5.3	474	4	15	7658	428	1	8131	451
		OREGON	1	1	9620	5.7	553	1	7	8320	486			
517081		NEW HAMPSHIRE	2	4	7928	5.6	438	2	18	8430	458	2	9102	490
		VERMONT	2	2	4930	5.1	268	1	1	7480	428	1	7041	387
		CONNECTICUT	1	2	5365	5.3	284	1	11	8840	474	2	8383	451
		NEW YORK	4	5	6255	5.3	333	1	29	6630	359	2	7238	379
		NEW JERSEY	1	2	9440	5.4	512	1	2	8510	495	1	8469	445
		PENNSYLVANIA	20	31	6609	5.4	353	9	13	7953	406	2	7696	407
		OHIO	6	11	8008	5.3	414	5	11	8042	408	1	8292	445
		INDIANA	4	8	7513	5.6	419	2	9	7255	388	1	8022	392
		ILLINDIS	5	6	7194	5.5	387	4	4	6753	379	1	7325	369
		MICHIGAN	4	7	7291	5.5	402	2	9	7175	381	1	7832	414
		WISCONSIN	9	14	6917	5.5	378	8	14	7554	388	2	7065	373
		MINNESOTA	1	2	6750	5.0	335	1	6	6510	432	1	7815	404
		IOWA	3	3	6380	5.7	372	3	20	7303	370	1	8211	429
		MARYLAND	3	4	7047	5.1	360	2	19	7820	408	1	8410	447
		TENNESSEE	2	3	7003	5.8	406	2	18	8003	434			
		ALABAMA	1	2	6995	5.4	372							
		ARKANSAS	1	1	8250	5.5	455	1	6	8750	427			
		TEXAS	1	1	6310	5.2	325	1	6	7350	349			
		WASHINGTON	7	16	7576	5.8	437	7	20	7482	415	2	8006	441
		CALIFORNIA	1	1	8430	5.2	435	1	9	10090	523			
520270		ILLINDIS	1	1	8170	5.7	463	1	1	8230	345	1	8175	387
		UTAH	1	2	9090	5.2	473	1	9	8275	425			
522014		VERMONT	3	3	5253	5.4	276	1	10	6260	317	1	7118	362
		MASSACHUSETTS	3	3	5093	5.7	287	3	7	8277	426	1	8339	450
		NEW YORK	3	3	8707	5.5	485	1	9	7520	418	1	7129	383
		PENNSYLVANIA	7	11	6343	5.8	349	2	7	5998	286	2	9135	474
		OHIO	1	1	6960	5.8	404	1	26	6640	343			
		INDIANA	1	1	8830	5.0	437	1	9	7710	405	1	7804	398
		MICHIGAN	2	4	7688	5.7	445	2	23	7955	399	2	8377	427
		WISCONSIN	3	3	6257	5.6	357	2	10	7000	374			
		IOWA	2	2	8110	5.0	400	2	7	9740	469	1	8764	413
		MISSOURI	1	3	6193	5.3	330	1	3	6605	345	1	6300	326
		DELAWARE	1	1	6140	6.4	392	1	13	6190	319			
		OREGON	2	3	6695	5.8	386	1	15	8925	461	1	8480	438
529355		CONNECTICUT	1	1	6680	5.1	338	1	14	8510	423			
		PENNSYLVANIA	1	2	8280	6.5	538							
		OHIO	2	4	7410	5.2	386	2	6	6348	309	2	6554	349
		INDIANA	1	2	8140	5.4	442	1	3	8365	425	2	7914	402
		MICHIGAN	1	2	8785	5.3	464	1	16	8890	470	1	7129	392
		WISCONSIN	1	1	9790	5.4	527	1	3	9330	436	1	8676	400
534119		NEW HAMPSHIRE	2	2	7310	5.3	386	1	3	7330	368	1	7772	387
		VERMONT	1	2	7080	5.8	403	1	19	7095	370	2	6813	366
		MASSACHUSETTS	1	1	6520	6.0	392	1	16	8230	462	1	8676	516
		OHIO	2	2	9730	5.2	496	2	11	9245	481	1	8208	443
		MICHIGAN	1	2	7880	5.3	421	1	31	7340	400			
		WISCONSIN	3	3	5850	5.3	306	3	7	6030	331			
		IOWA	1	1	8420	5.5	463	1	11	9020	461	1	8044	404
		COLORADO	1	3	6080	5.1	313	1	10	7300	374	1	13821	521
534366		NEW HAMPSHIRE	1	3	7583	5.4	408	1	23	8777	449	3	8622	444
		VERMONT	3	5	8995	5.0	457	1	2	13650	697	2	8096	421
		MASSACHUSETTS	2	4	6463	5.8	370	2	11	7813	399	2	8146	425
		CONNECTICUT	4	6	8783	5.3	455	4	16	9744	512	2	8195	441
		NEW YORK	2	3	8255	4.9	400	1	46	7690	394	2	8153	415
		PENNSYLVANIA	15	26	7433	5.1	378	5	18	7870	419	1	7467	379
		OHIO	6	12	8024	5.4	430	6	4	7950	408	1	7307	396
		INDIANA	3	6	8320	4.6	382	2	5	9470	484	1	8840	428
		ILLINOIS	4	9	8917	5.3	470	3	12	8280	436	1	8382	445
		MICHIGAN	3	5	7420	4.8	349	1	31	7360	399	1	7129	392
		WISCONSIN	11	21	7158	5.0	357	10	10	7612	405	2	7603	409
		IOWA	1	1	7320	5.3	386	1	28	7240	388			
		MARYLAND	2	4	6447	5.1	331	1	12	6083	318	3	6598	334
		COLORADO	1	2	7410	4.8	355	1	16	6460	317	1	13821	521
		UTAH	2	4	7252	5.0	361	2	18	7935	409			

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LBS.	TEST PCT.	FAT LBS.	305-DAY NO. DAUS.	CONTEMPORARY RECORDS NO.	MILK LBS.	FAT LBS.	AV. RECORDS NO.	YEARLY MILK LBS.	HERD FAT LBS.
		WASHINGTON	3	7	10258	4.9	500	1	20	7890	434	1	8186	456
		OREGON	1	2	9215	4.7	434							
	535607	VERMONT	4	4	8263	5.1	417	4	12	8003	401	1	8607	445
		MASSACHUSETTS	1	1	9200	5.6	536	1	12	8490	462	1	8622	473
		PENNSYLVANIA	2	2	8055	4.4	354							
		INDIANA	1	1	6920	5.6	384							
		MINNESOTA	1	2	10170	5.1	511	1	64	9620	521	1	7837	424
		OKLAHOMA	1	1	8780	4.8	421	1	28	9230	470			
		COLORADO	1	2	6835	5.3	363	1	8	7265	354			
	543688	IOWA	1	1	6660	5.1	342							
		OKLAHOMA	1	1	6510	4.6	301							
	546648	MAINE	1	1	7300	4.8	347					1	10922	445
		NEW HAMPSHIRE	3	3	4987	5.4	269	3	10	6500	341	1	7710	403
		VERMONT	5	6	8392	5.2	437	5	15	6808	351	1	7211	372
		MASSACHUSETTS	3	4	8217	5.3	435	2	10	8560	470	2	8840	473
		NEW YORK	8	9	8074	5.1	414	6	18	7443	380	1	7497	388
		PENNSYLVANIA	7	10	6146	5.1	310	1	7	7120	353	1	7619	375
		OHIO	4	5	7540	5.0	380	3	14	8513	427	1	8148	428
		INDIANA	3	3	9500	5.2	490	2	12	6890	354	1	7619	384
		ILLINOIS	2	4	7457	5.1	379	2	15	9179	484	2	7965	428
		MICHIGAN	6	6	7868	5.2	406	5	22	8046	418	1	8161	431
		WISCONSIN	3	3	7623	5.1	387	3	17	7303	376	1	7481	397
		MINNESOTA	3	4	7885	5.2	410	3	35	7767	404	1	8230	351
		IOWA	2	5	7727	5.2	392	2	16	8114	388	1	7391	377
		MISSOURI	1	1	8740	5.1	442							
		NEBRASKA	1	1	8940	4.7	422	1	6	7170	384			
		VIRGINIA	1	1	5530	5.5	306							
		TENNESSEE	1	1	5680	5.0	283							
		TEXAS	1	1	4590	4.9	224	1	4	6030	300			
		COLORADO	1	1	8620	5.4	479							
		WASHINGTON	1	2	4480	4.8	216	1	28	6080	300	2	7161	367
		OREGON	2	2	8350	5.1	424	1	11	9530	502	1	10988	491
	550196	MASSACHUSETTS	1	1	7490	5.5	414	1	3	5340	293	1	7706	447
		CONNECTICUT	1	1	7410	6.0	446	1	12	6970	393	1	7913	439
		PENNSYLVANIA	1	1	2180	5.2	114	1	3	3680	238	1	8731	438
		ILLINOIS	1	1	7090	4.7	335	1	4	7620	327			
		WISCONSIN	1	1	6420	6.1	394							
		NEVADA	1	1	3510	4.1	143	1	3	8080	379			
	550722	VERMONT	1	4	8170	5.3	437	1	42	7420	358	1	6464	337
		NEW YORK	1	1	9340	5.5	516							
		PENNSYLVANIA	1	2	8560	5.2	445							
		OHIO	2	2	8175	5.3	430	2	16	9230	485	1	6202	331
		INDIANA	1	1	8050	4.6	367	1	1	12310	522	1	7990	386
		MINNESOTA	1	1	6190	5.7	355	1	11	7670	418	1	8644	469
		MISSOURI	1	1	11250	5.2	589							
	550723	VERMONT	1	1	7420	5.1	376	1	15	6510	350	1	6965	376
		MASSACHUSETTS	1	1	6380	5.2	333	1	12	8720	478	1	8567	469
		PENNSYLVANIA	4	5	7480	5.1	381	2	10	7790	403	1	7761	407
		OHIO	1	3	6307	5.2	331	1	5	8805	491	1	7924	434
		INDIANA	1	1	5490	5.9	323	1	4	5910	291	1	7794	403
		ILLINOIS	2	2	6030	4.6	274	1	11	8100	412	1	8764	440
		MICHIGAN	2	2	7355	5.1	374	1	8	7460	340	1	8012	384
		WISCONSIN	1	1	7320	5.2	381	1	3	7390	351	1	6704	342
		IOWA	1	1	7230	5.4	391	1	14	6420	373			
		MISSOURI	1	1	15770	5.9	924							
		MARYLAND	1	2	7695	5.3	408	1	10	8060	409	1	8720	461
		TEXAS	1	2	8370	5.0	420	1	13	7020	359	1	6638	344
		COLORADO	1	1	6250	5.8	363	1	12	7170	350			
		OREGON	1	1	5270	4.9	257	1	7	8940	528			
	553507	VERMONT	1	2	8005	5.4	434	1	20	6890	364	2	6856	369
		MASSACHUSETTS	1	1	7890	6.1	480	1	11	7240	390	1	8339	450
		CONNECTICUT	1	1	6580	5.4	358	1	22	8090	430	1	8175	434
		NEW YORK	3	4	9288	4.9	451	1	7	5420	275	1	6344	324
		PENNSYLVANIA	9	12	7280	5.0	360	3	8	7115	357	1	7385	377
		INDIANA	2	5	6552	5.5	355	2	7	7260	410	1	7183	382
		ILLINOIS	1	1	11610	4.4	508	1	23	8440	407			
		MICHIGAN	1	1	8750	4.9	429	1	30	8360	425	1	8110	427
		WISCONSIN	2	2	5805	5.6	324	2	9	8485	446	1	8661	454
		MINNESOTA	1	1	9060	5.2	469	1	86	9860	525			
		IOWA	1	1	8200	4.4	363					1	11739	676
		NEBRASKA	1	1	8550	5.3	450	1	7	7020	374	1	7477	399
		COLORADO	2	2	7500	5.1	375	2	10	7035	351	1	10933	467
	557267	NEW HAMPSHIRE	1	1	7690	4.8	372	1	31	8850	447	1	8818	450
		VERMONT	8	11	6115	5.1	308	6	13	7381	371	1	7569	389
		MASSACHUSETTS	3	7	9390	5.4	504	3	10	8343	455	1	8502	473
		CONNECTICUT	5	8	8291	5.0	416	3	12	7983	432	2	8120	440
		NEW YORK	7	8	6579	5.2	338	4	21	6318	319	1	9361	461

TABLE 16.--DAUGHTER-AVERAGE DF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE ND.	RECORDS FROM STATE	DAUGHTERS ND.	RECORDS ND.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
								ND. DAUS.	RECORDS ND.	MILK LB.	FAT LB.	RECORDS ND.	MILK LB.	FAT LB.
		PENNSYLVANIA	6	7	7226	5.2	374	1	7	8560	435			
		DHID	2	2	6290	5.0	310	1	12	6620	364			
		INDIANA	8	12	7568	5.0	372	7	7	8365	444	1	8460	434
		ILLINOIS	6	7	6274	5.4	333	6	8	6565	344	1	7636	389
		MICHIGAN	4	9	8701	5.4	470	4	12	8094	426	1	9323	494
		WISCONSIN	6	8	7901	5.2	409	6	12	7960	389	1	9209	450
		IOWA	2	2	9655	5.4	517	1	4	8150	467	1	8159	398
		MISSOURI	3	5	9343	5.4	503	2	10	8735	457	1	8480	494
		NEBRASKA	1	1	7110	4.9	351							
		MARYLAND	3	5	6793	4.9	334					1	7511	393
		WEST VIRGINIA	2	2	16125	5.0	705	2	6	7540	390			
		TENNESSEE	2	2	8545	5.2	445	2	36	7690	415			
		ARKANSAS	1	1	8250	4.9	405	1	23	7250	394			
		UTAH	4	7	6631	5.2	344	4	18	8070	408			
		WASHINGTON	7	9	6960	5.1	355	6	11	8318	420	1	9200	483
		CALIFORNIA	1	1	6330	5.4	340	1	9	8650	453			
557268		NEW HAMPSHIRE	2	2	7360	5.6	407	1	15	8550	440	1	8894	457
		VERMONT	14	19	6431	5.6	357	12	16	7564	384	1	7662	396
		MASSACHUSETTS	8	14	8017	5.7	452	8	12	7855	436	2	8442	462
		RHODE ISLAND	1	1	6500	5.2	336							
		CONNECTICUT	3	3	8923	5.6	502	2	14	9065	476	1	9050	464
		NEW YORK	14	16	5954	5.5	327	12	23	6655	332	1	7731	388
		PENNSYLVANIA	14	22	5441	5.2	280	4	10	7931	402	1	7239	383
		OHIO	6	7	6902	5.4	382	5	10	8868	471	1	9064	449
		INDIANA	8	13	6564	5.5	359	8	14	7868	400	1	7901	396
		ILLINOIS	9	12	6931	5.7	390	9	11	7009	394	1	8462	456
		MICHIGAN	3	8	7260	5.7	413	3	27	8092	433	1	8717	459
		WISCONSIN	7	10	7071	5.8	409	7	20	8259	418	1	8636	445
		MINNESOTA	3	5	7393	5.4	398	3	22	8203	443	1	7270	394
		IOWA	6	9	8140	5.6	456	4	6	8616	451	1	7378	398
		MISSOURI	7	11	7325	5.3	387	5	17	7962	438	1	9134	498
		DELAWARE	1	2	6630	5.7	378	1	43	8950	452	2	9058	457
		MARYLAND	7	10	6524	5.5	358	2	5	8710	456	1	7074	366
		TENNESSEE	3	3	6327	5.7	361	3	31	8000	430			
		ARKANSAS	1	1	6050	5.7	347	1	23	7350	397			
		OKLAHOMA	2	3	6995	5.6	392	2	14	7203	394	1	6573	359
		TEXAS	2	2	6960	4.9	340	2	7	6635	326			
		IDAHO	1	1	6200	5.1	316							
		COLORADO	1	3	8023	5.5	438	1	8	6995	347			
		UTAH	1	2	5400	4.7	254	1	24	7100	352			
		WASHINGTON	15	27	6593	5.7	373	14	17	7341	401	2	7965	439
		OREGON	3	3	8367	6.2	519	2	7	9105	499			
558300		NEW HAMPSHIRE	1	1	7140	5.5	394	1	31	8870	446	1	9156	464
		VERMONT	1	1	7890	5.3	418	1	10	8820	413			
		MASSACHUSETTS	1	1	7760	5.3	410					1	8611	476
		DHID	1	1	2380	5.6	133	1	11	4300	218			
		INDIANA	1	1	5230	5.4	281	1	19	7260	356	1	8219	370
		ILLINOIS	1	1	6450	6.0	389	1	31	6660	375	1	8437	460
		WISCONSIN	3	3	8080	5.6	449	3	11	7663	398	1	8193	423
		MISSOURI	1	1	3310	4.6	152	1	3	4720	254	1	8480	494
		WASHINGTON	1	1	6040	5.9	354	1	14	8840	472	1	8742	476
561487		VERMONT	1	1	6650	4.8	321	1	11	6910	346	1	8720	428
		MASSACHUSETTS	1	1	6480	5.6	365	1	1	5760	257	1	8807	445
		NEW YORK	2	3	7520	5.7	431	2	13	6610	354	2	7015	366
		PENNSYLVANIA	1	2	6975	5.3	366							
		INDIANA	1	1	9780	5.2	509	1	10	7760	406	1	7804	398
		MICHIGAN	1	2	8490	5.7	484							
		WISCONSIN	2	2	9265	5.7	518	2	22	8570	395	1	9074	419
		MINNESOTA	1	1	8260	4.6	376	1	10	7740	396	1	7107	358
		IOWA	1	1	5760	6.4	367							
		MISSOURI	1	2	4580	5.6	257	1	2	4160	200	1	8480	494
		NEBRASKA	1	1	5450	5.1	276	1	4	7050	392			
561488		VERMONT	1	1	8140	5.2	425	1	17	7300	372	1	8110	407
		NEW YORK	1	1	4010	5.3	210	1	16	8660	386			
		DHID	1	2	4150	5.6	234					1	8273	410
		MICHIGAN	1	2	7375	5.0	368	1	20	7235	380	2	8175	430
		KENTUCKY	1	1	5040	5.3	269							
562740		ILLINOIS	1	1	8550	5.5	466	1	10	9020	440			
569526		ILLINOIS	1	1	8970	5.6	503	1	16	8390	426			
B.S.	41664	INDIANA	1	1	8000	4.8	380							
64837		NEW YORK	12	21	10555	4.2	435	7	24	10986	464	3	11582	476
		NEW JERSEY	3	5	8503	4.3	362	2	16	10703	425	2	11029	446
		PENNSYLVANIA	14	28	10469	4.0	421	10	10	11077	461	2	11115	463
		DHID	3	4	11160	4.1	458	2	7	9935	406	1	10579	433
		INDIANA	11	25	11210	4.0	445	10	6	11162	460	2	11372	463
		ILLINOIS	10	20	10411	4.0	414	9	9	11091	440	2	10924	437
		MICHIGAN	8	12	11030	4.1	449	3	4	10043	410	1	11332	453

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAS.	CONTEMPORARY NO. RECORDS.	MILK LB.	FAT LB.	AV. RECORDS NO.	YEARLY RECORDS NO.	HERO LB.	AV. FAT LB.
			WISCONSIN	18	30	9445	3.8	357	16	11	10296	404	2	2	9742	382
			MINNESOTA	3	6	8920	3.9	348	2	10	8833	349	2	2	10138	410
			IOWA	5	5	10442	4.3	443	2	11	11335	453	1	1	11625	457
			SOUTH DAKOTA	1	4	9838	4.6	444								
			NEBRASKA	1	2	7090	4.0	286	1	20	9270	395	1	1	8131	338
			DELAWARE	1	1	9840	4.6	448	1	13	10960	478	1	1	10987	479
			MARYLAND	5	9	8868	3.9	341	5	13	8469	343	2	2	8473	341
			VIRGINIA	1	1	13240	4.0	525					1	1	11401	460
			KENTUCKY	1	4	9220	4.3	401	1	1	6920	298				
			ALABAMA	1	1	4800	4.3	206								
			IDAHO	2	4	10024	4.3	425	1	3	12280	542				
			ARIZONA	1	2	12005	3.7	434	1	14	13370	525				
			WASHINGTON	1	1	11300	4.5	512	1	4	10780	439	1	1	12023	464
			CALIFORNIA	1	6	10272	4.4	457	1	7	14683	602				
		72394	VERMONT	1	1	11850	4.0	474	1	9	9280	375	1	1	9429	389
			MASSACHUSETTS	1	1	5490	4.3	235								
			NEW YORK	3	3	10660	4.2	433	2	8	9880	404	1	1	10214	429
			NEW JERSEY	2	2	9785	4.5	418	2	10	10665	448	1	1	10148	441
			PENNSYLVANIA	1	2	6690	4.2	281	1	13	9160	369	1	1	8328	343
			OHIO	2	2	9335	4.0	375	2	23	10665	434	1	1	11156	451
			INDIANA	2	3	9855	4.3	432	1	5	7675	293	2	2	9341	368
			ILLINOIS	3	4	11252	4.2	475	3	9	11775	465	2	2	12666	517
			MICHIGAN	1	2	6290	4.1	260	1	19	11920	485	1	1	10998	447
			WISCONSIN	8	12	10932	4.0	442	7	9	9596	370	1	1	10993	431
			MINNESOTA	1	1	8770	3.5	311	1	5	7840	332	1	1	8753	349
			IOWA	2	4	9050	4.2	374	1	13	9985	372	3	3	7437	398
			MARYLAND	2	5	7545	4.2	313	1	18	8615	359	2	2	9366	391
			VIRGINIA	1	1	12040	3.6	431								
			LOUISIANA	1	2	9985	4.1	408								
			COLORADO	1	2	11245	3.9	438	1	7	10710	432				
		82405	VERMONT	7	10	8851	4.2	372	5	9	10170	411	1	1	9565	384
			MASSACHUSETTS	3	5	11768	4.2	499					2	2	12873	560
			CONNECTICUT	3	3	7490	4.1	307	3	2	7513	327	1	1	7187	395
			NEW YORK	18	30	11698	4.2	492	11	19	10818	454	2	2	10667	445
			NEW JERSEY	10	14	10717	4.4	467	5	17	11448	489	1	1	11564	498
			PENNSYLVANIA	25	39	9103	4.2	389	19	8	10767	436	1	1	10469	429
			OHIO	13	17	11229	4.3	477	4	7	10900	458	1	1	10241	420
			INDIANA	25	41	11212	4.2	469	18	5	11282	454	2	2	11197	456
			ILLINOIS	20	30	11030	4.2	462	12	11	11735	477	1	1	11037	461
			MICHIGAN	10	14	11276	4.2	469	6	6	11708	471	1	1	11080	451
			WISCONSIN	52	103	10164	4.1	414	42	11	11022	438	2	2	10660	426
			MINNESOTA	2	6	10929	3.8	418	2	6	11298	446	3	3	10640	420
			IOWA	4	5	10961	4.0	435	2	18	11860	486	1	1	9483	381
			MISSOURI	4	12	10666	4.2	444	4	9	11432	468	2	2	10326	426
			NEBRASKA	2	2	8895	4.2	366	2	9	10135	403	1	1	9407	398
			KANSAS	5	8	9768	4.6	449								
			VIRGINIA	2	2	9300	4.2	387								
			FLORIDA	4	5	8160	4.2	338	1	1	8570	329				
			KENTUCKY	1	3	6597	4.0	264	1	6	9800	371	2	2	10312	409
			TENNESSEE	1	2	9080	3.4	304								
			ALABAMA	1	2	8445	3.7	309								
			MISSISSIPPI	2	4	12427	3.7	462								
			IDAHO	4	7	10048	4.4	437	3	9	10680	459	1	1	9712	418
			COLORADO	1	1	11740	4.2	493								
			UTAH	1	1	11160	4.3	482								
			WASHINGTON	1	1	13410	4.5	602	1	5	11680	493	1	1	12023	464
			OREGON	1	1	10690	4.5	481	1	11	10780	390				
		85628	WISCONSIN	2	4	9150	4.4	405	1	13	9373	378	1	1	10007	407
		86498	INDIANA	1	2	9735	3.4	331	1	6	8940	330	2	2	7968	312
			ILLINOIS	1	1	14770	4.0	595	1	11	13610	543	1	1	15064	596
			WISCONSIN	1	2	7025	4.5	317	1	11	10560	410	2	2	11957	462
			LOUISIANA	1	2	8785	4.1	362								
		90092	PENNSYLVANIA	3	4	10350	3.8	395	2	8	10095	428	1	1	9500	397
			INDIANA	2	5	8559	4.0	340	2	4	8535	321	3	3	9435	377
			MICHIGAN	2	3	9653	4.1	394	2	6	9728	380	2	2	9505	372
			WISCONSIN	6	6	9587	3.7	349	3	5	11403	475	1	1	10428	434
			KENTUCKY	1	2	6760	4.5	301								
			TEXAS	1	1	12320	4.1	500	1	37	11700	462	1	1	7913	311
		91234	MAINE	2	2	10965	4.1	454								
			VERMONT	6	8	10801	4.1	447	5	9	9430	392	1	1	9725	406
			MASSACHUSETTS	4	6	10341	4.2	423	4	14	8883	373	2	2	9657	401
			CONNECTICUT	1	1	8060	3.9	317								
			NEW YORK	13	22	11388	4.0	452	8	12	11569	476	2	2	12062	476
			NEW JERSEY	6	9	11786	3.9	461	4	18	11116	455	1	1	12010	482
			PENNSYLVANIA	13	23	10340	4.2	424	3	15	10882	446	1	1	10451	434
			OHIO	6	13	11498	3.8	439	4	9	11970	484	1	1	10458	418
			INDIANA	11	20	12431	3.8	468	6	4	11751	459	2	2	11265	439
			ILLINOIS	12	15	10352	3.9	406	6	8	10581	426	1	1	8982	364
			MICHIGAN	5	8	11805	3.8	443	3	8	11026	447	2	2	10704	442

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECDRS WERE MADE

STUD BREED	SIRE NO.	RECORDS FRDM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. OAS.	RECDROS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		WISCONSIN	11	21	10272	3.9	392	5	8	10904	433	2	10674	425
		MINNESOTA	1	1	8400	3.7	313	1	10	8790	349			
		IOWA	6	10	9695	4.1	394	6	15	9627	380	2	9397	449
		DELAWARE	1	2	10280	4.3	439	1	16	9260	410	1	11500	491
		MARYLAND	3	4	6510	4.0	260	3	22	9107	361	1	8415	332
		GEORGIA	1	1	12470	3.6	453	1	1	11300	456	1	12982	517
		KENTUCKY	1	1	13080	4.1	532							
		ALABAMA	1	1	6030	4.1	248							
		COLORADO	2	3	10640	4.3	459	2	12	8860	364	1	11194	421
		ARIZONA	1	1	17330	3.9	680	1	14	12970	510			
	91856	VERMONT	2	2	9455	3.9	362					1	10453	438
		CONNECTICUT	1	1	3320	4.3	143	1	1	3940	171			
		NEW YORK	1	1	12870	4.5	581	1	20	12790	516			
		NEW JERSEY	2	2	9545	4.5	432	1	28	11950	490	1	11085	465
		PENNSYLVANIA	1	2	8465	4.2	351							
		DHID	1	4	10693	4.0	430	1	7	10165	416	4	10524	424
		INDIANA	9	17	12406	4.2	522	8	7	12645	517	2	11791	483
		ILLINOIS	2	2	7565	4.1	316	1	8	9040	389			
		MICHIGAN	4	7	9441	4.0	376	3	36	9867	388	1	11151	430
		WISCONSIN	7	13	9055	4.2	373	5	6	9767	400	2	8618	345
		MINNESOTA	1	1	7260	4.1	296	1	15	11180	450	1	11412	455
		IOWA	6	9	10878	4.1	448	6	17	11400	457	1	11015	444
		DELAWARE	1	2	10270	4.5	464	1	16	9260	407	1	11500	491
		MARYLAND	1	1	7210	3.9	284							
	94606	MAINE	1	3	12600	3.6	476							
		VERMONT	5	6	10245	4.2	431	3	9	10450	441	1	10531	418
		MASSACHUSETTS	2	3	10188	4.4	450	2	23	10058	414	2	9426	390
		NEW YORK	6	13	13606	4.0	538	5	21	12017	487	2	11589	475
		NEW JERSEY	5	9	12092	4.1	500	3	21	11940	480	1	11089	463
		PENNSYLVANIA	9	11	9393	4.3	404	6	10	11477	476	1	11007	458
		OHIO	4	4	10258	4.1	417	4	12	10205	415	1	10518	422
		INDIANA	9	14	11026	4.2	465	7	8	11097	460	1	10742	429
		ILLINOIS	7	11	10349	4.3	443	6	12	10333	406	2	9580	389
		MICHIGAN	1	1	8300	4.3	355	1	5	9670	386	1	10617	421
		WISCONSIN	7	19	11280	4.0	450	6	11	11668	452	2	11021	436
		MINNESOTA	1	1	9980	4.2	420	1	19	8590	346	1	9799	399
		IOWA	3	7	9599	3.9	373	3	10	9766	380	2	8979	383
		NORTH DAKOTA	1	2	12120	4.1	492	1	22	11600	500			
		MARYLAND	3	3	9380	4.4	415	2	8	8700	328	1	11794	464
		ARIZONA	1	2	15155	3.7	551	1	14	13170	518			
		WASHINGTON	1	2	14390	4.5	646	1	11	13840	549			
	94773	MASSACHUSETTS	2	3	8325	4.3	346	1	10	8200	368			
		NEW JERSEY	2	3	13755	4.0	548	2	12	11630	475	1	12448	517
		PENNSYLVANIA	5	7	11145	4.1	450	1	10	8750	357	1	9625	391
		OHIO	4	7	9566	4.0	389	3	10	9718	400	3	9689	401
		INDIANA	6	10	10373	4.1	420	3	5	11017	437	2	9892	402
		ILLINOIS	2	3	11185	4.3	475	2	15	11168	445			
		MICHIGAN	5	8	12605	3.9	490	5	9	11503	463	1	10891	446
		WISCONSIN	11	25	9645	4.0	378	9	9	9566	382	2	9910	396
		MINNESOTA	1	1	7680	4.2	323							
		IOWA	2	2	4915	4.1	198	1	11	10750	417	1	10965	413
		MARYLAND	2	3	11005	4.4	478	2	15	10375	443	1	11097	458
		VIRGINIA	1	1	8160	4.8	389					1	11609	469
		OKLAHOMA	1	1	9890	4.2	416							
		TEXAS	1	2	10395	3.7	388	1	9	9645	356	2	11750	465
		ARIZONA	1	1	10790	3.8	413	1	12	13820	542			
	96330	PENNSYLVANIA	1	2	8290	4.5	373							
		INDIANA	2	5	9548	3.8	352	2	9	9627	389	2	10783	427
		MICHIGAN	1	2	7330	3.5	253	1	19	8240	305			
		WISCONSIN	2	4	8518	3.8	320	1	20	9755	403	2	9873	399
		VIRGINIA	1	1	6620	4.0	268							
	99438	VERMONT	2	2	9440	4.2	392							
		MASSACHUSETTS	1	1	12420	4.7	579	1	15	11860	517			
		CONNECTICUT	2	3	11400	4.5	508	2	10	11960	521	1	11816	500
		NEW YORK	5	8	12011	4.4	505	2	22	9545	474	1	10885	447
		NEW JERSEY	1	1	7610	4.3	326	1	13	10240	416	1	10431	427
		PENNSYLVANIA	5	9	8990	4.3	387	2	6	12002	470	2	10613	440
		OHIO	2	4	11155	4.3	470	1	10	10770	443	2	10769	439
		INDIANA	4	5	11058	4.2	458	4	6	11353	472	1	11758	486
		ILLINOIS	7	10	9679	4.1	389	7	8	10404	425	2	10225	408
		MICHIGAN	9	14	10675	4.2	442	5	9	11547	467	1	11090	458
		WISCONSIN	9	18	10000	4.2	419	6	7	9453	383	2	9163	380
		IOWA	9	15	8906	4.0	357	9	13	9922	395	1	10970	454
		KANSAS	1	1	8400	4.2	353							
		MARYLAND	1	1	7610	3.9	298	1	18	8610	329			
		GEORGIA	1	1	8570	4.4	378							
		ALABAMA	1	1	9500	4.0	378					1	8022	307
		COLORADO	1	1	9060	4.6	417	1	5	9080	421			
		WASHINGTON	3	3	13313	4.0	532	2	3	11295	474	1	12023	464

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.			YEARLY HERD AV.				
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	
M. SH		100513	VERMONT	3	4	9063	4.1	357	2	9	8120	343	2	7745	318	
			MASSACHUSETTS	2	2	8480	4.3	362	1	7	7050	300	1	8246	344	
			NEW YORK	5	10	11072	4.1	453	3	12	12074	468	2	11394	441	
			PENNSYLVANIA	3	6	10241	4.4	454	2	9	11614	489	2	10730	453	
			OHIO	4	5	8504	4.3	361	3	6	11013	449	1	10889	436	
			INDIANA	6	11	9855	4.3	475	4	9	12236	491	2	11660	467	
			MICHIGAN	2	2	10515	4.2	436	1	3	14550	554	1	11990	493	
			WISCONSIN	7	11	10021	3.9	395	5	9	9538	378	1	9656	378	
			MINNESOTA	2	2	12060	3.7	445	1	10	8290	336				
			IOWA	4	6	9028	4.1	368	4	9	10568	427	1	10980	431	
			MARYLAND	2	3	5300	4.3	227	2	13	9503	376	2	9797	388	
			GEORGIA	1	1	10420	4.2	436								
			IDAHO	2	8	8615	4.2	355	2	4	9180	387	1	10355	459	
			104401	WISCONSIN	1	3	12760	3.6	459	1	7	12380	496	2	11222	446
			106482	NEW JERSEY	1	1	11670	4.0	467							
				PENNSYLVANIA	3	6	13172	4.2	559	3	9	10824	452	2	10004	419
				INDIANA	2	5	9912	4.2	412	1	12	11755	476	2	11527	474
				ILLINOIS	1	2	13220	4.3	560	1	2	8930	418	1	8905	397
				WISCONSIN	1	1	12930	3.7	479							
			107491	ILLINOIS	1	1	10280	4.4	454	1	15	11320	454			
			109851	ILLINOIS	1	5	10556	4.7	489	1	8	12275	482	1	11162	480
				WISCONSIN	1	1	11440	4.6	527	1	13	12600	502	1	11271	460
			117125	VERMONT	2	3	11600	4.5	531	1	10	12600	529	1	13636	582
				MASSACHUSETTS	1	1	8290	4.3	355	1	27	8570	355	1	8840	363
				CONNECTICUT	1	1	7130	4.7	333							
				NEW YORK	1	1	14630	4.3	643							
				NEW JERSEY	2	3	10848	4.4	472	2	10	11570	462	2	11524	484
				PENNSYLVANIA	3	3	10400	4.4	449	1	16	11090	447	1	11750	488
				OHIO	3	3	10760	4.3	460	1	18	10000	416	1	10333	423
				ILLINOIS	3	3	11220	4.2	471	3	8	11377	479	1	15064	596
				MICHIGAN	2	2	12580	3.9	488	1	16	13090	517	1	13036	522
				WISCONSIN	1	1	9970	3.9	388							
				IOWA	4	9	8674	4.3	369	4	13	10248	395	2	8206	426
				MARYLAND	2	2	10920	4.2	452					1	10126	400
				COLORADO	2	3	10825	4.3	463	2	12	10440	417	1	10726	434
			119330	NEW JERSEY	1	1	10240	4.1	418	1	13	13790	559	1	12023	510
				PENNSYLVANIA	1	1	11010	4.0	441							
				MICHIGAN	1	1	13510	4.1	561	1	8	11900	482	1	11107	455
				IOWA	2	2	7775	3.9	308	2	6	8075	333	1	10066	405
				IDAHO	2	2	11390	4.2	477	2	4	10730	474	1	10355	459
			120226	MAINE	1	1	10480	4.7	496							
				VERMONT	1	1	7110	4.4	314	1	6	6120	274	1	6235	266
				NEW YORK	2	3	12883	3.9	505	2	9	11428	482	2	11560	486
				NEW JERSEY	3	3	10640	4.3	459	2	15	12035	506	1	11342	475
				PENNSYLVANIA	2	2	12300	4.3	532	1	2	11950	485	1	12219	505
				OHIO	1	1	11360	4.0	454	1	8	9620	365			
				INDIANA	1	1	11840	4.2	500							
				ILLINOIS	1	1	12140	3.8	467	1	3	9520	404			
				MICHIGAN	2	4	9055	4.4	397							
				MINNESOTA	1	1	11260	4.2	471	1	19	8520	343	1	9799	399
				IOWA	1	1	5410	4.5	244	1	9	5800	230			
				TEXAS	1	1	11690	4.0	467	1	12	9540	358			
			123323	IOWA	1	1	11430	3.4	387	1	1	9120	363	1	11325	446
			124697	COLORADO	1	1	8760	4.5	395	1	9	11570	476			
			125091	NEW YORK	1	1	11040	4.1	453	1	2	12070	553			
		17915	NEW YORK	1	1	9620	3.9	377								
			PENNSYLVANIA	4	5	8213	3.7	305	2	5	5698	205	1	5308	196	
			MICHIGAN	1	2	8265	3.8	315								
			IOWA	4	5	7335	3.9	287	2	8	8610	318	2	6396	345	
		21366	MICHIGAN	1	1	6200	3.8	238								
		27712	NEW YORK	7	7	7003	3.8	266	3	8	6547	255	1	6464	250	
			PENNSYLVANIA	6	10	7717	3.8	296	2	3	4730	174	1	5663	218	
			OHIO	3	3	7980	3.6	293	3	6	8370	310	1	9145	372	
			ILLINOIS	1	1	8650	4.1	354	1	2	10150	361				
			WISCONSIN	2	2	5880	3.9	230	2	2	8835	329	1	9113	346	
			IOWA	1	2	7015	3.8	267	1	6	8610	324	2	7734	285	
		45443	NEW YORK	3	4	8057	4.1	326	1	9	6440	256	1	6649	253	
			PENNSYLVANIA	4	4	7263	3.8	268	1	5	6560	234				
		92492	PENNSYLVANIA	1	1	4520	3.6	162	1	5	5130	179	1	5308	196	
			ILLINOIS	1	4	7843	3.6	286								

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
			IOWA	1	1	8510	3.8	327	1	12	9530	349			
		121506	NEW YORK	2	2	7260	4.0	286	1	18	10670	368	1	11129	380
			PENNSYLVANIA	2	3	7660	4.4	333							
			OHIO	2	3	10380	3.9	404	2	11	10403	405	1	7870	300
			IOWA	1	1	6430	4.1	261	1	5	10650	399	1	8796	330
		140732	PENNSYLVANIA	1	2	8715	3.3	289	1	5	5405	197	1	5308	196
		170851	PENNSYLVANIA	1	1	5030	4.0	199	1	4	5720	195	1	6246	222
			INDIANA	1	1	11120	3.5	394	1	4	6470	256	1	8971	343
			MICHIGAN	2	2	14985	3.7	543	1	4	12250	438	1	9668	342
		187649	IOWA	1	1	8780	3.7	322	1	3	10090	371	1	8993	334
		190439	PENNSYLVANIA	1	1	9110	3.9	355	1	10	10480	395	1	9178	353
			IOWA	1	2	10190	4.0	405		9	8660	321			
		215779	IOWA	1	1	10270	3.1	323	1	12	9380	349			
		2680184	PENNSYLVANIA	1	2	4820	4.2	193	1	3	8525	324	2	5325	221
004	GUER	335822	ILLINOIS	12	29	8049	4.7	373	6	6	9378	454	2	9147	441
		336257	ILLINOIS	1	6	6885	4.8	333	1	1	6033	334			
		362809	ILLINOIS	7	19	8314	4.7	383	6	4	8401	412	2	8647	407
			IOWA	1	1	10210	4.4	454	1	5	10640	483			
		415836	ILLINOIS	5	14	9149	5.2	475	4	5	8392	400	3	9041	438
		444713	WISCONSIN	2	2	7510	4.1	309	2	4	5300	283	1	7756	303
	M.SH	2330714	ILLINOIS	1	2	7285	3.7	272							
005	8.S.	37565	MASSACHUSETTS	1	2	10300	4.4	453							
			CONNECTICUT	1	3	10560	3.8	403	1	10	11307	449	2	12017	492
			OHIO	1	2	13110	4.5	586							
			ILLINOIS	24	94	11377	4.2	486	14	7	11959	490	2	11537	491
			WISCONSIN	2	5	9179	4.3	395	1	7	9175	356			
			MINNESOTA	1	1	8420	4.2	351							
			IOWA	2	11	10457	4.2	440	2	6	10432	415	2	8728	342
			SOUTH DAKOTA	2	9	12474	4.0	489							
			KANSAS	1	1	9300	4.6	431							
			KENTUCKY	1	2	10785	4.1	445							
			COLORADO	1	1	15320	3.7	571							
			OREGON	1	3	10960	4.7	513							
007	GUER	205924	ILLINOIS	1	2	8195	5.1	417							
		289661	ILLINOIS	9	13	8514	4.4	370							
		293593	CONNECTICUT	2	8	8198	5.0	411	1	9	9960	457	2	8649	430
			NEW JERSEY	29	68	8919	4.7	419	4	9	9295	440	2	8794	389
			PENNSYLVANIA	2	2	6025	4.8	288							
			ILLINOIS	3	14	10041	4.7	465	2	9	9004	439	4	8893	428
	HOL.	813661	ILLINOIS	1	4	17650	3.4	598	1	3	12117	462	4	13116	486
008	GUER	353771	ILLINOIS	3	17	9040	5.0	445	2	7	10803	534	5	10467	531
			WISCONSIN	1	1	10080	4.3	432							
	JER.	517082	MAINE	1	1	5360	5.5	295	1	9	8400	400	1	8219	393
			VERMONT	5	6	10645	5.1	493	4	7	6898	355	1	6922	356
			MASSACHUSETTS	2	2	6960	5.2	361	2	8	8620	458	1	8873	494
			CONNECTICUT	4	5	10515	5.4	509	4	11	7893	436	1	9382	463
			NEW YORK	1	2	4720	5.0	235	1	57	7640	398	1	7794	377
			PENNSYLVANIA	9	18	6350	5.5	348	3	12	6900	351	1	6402	349
			OHIO	2	3	7610	5.4	397	2	24	7338	381			
			ILLINOIS	2	6	5935	5.8	339	1	7	6775	343	2	7047	372
			WISCONSIN	5	5	6270	5.2	333	5	16	7122	377	1	6894	376
			MINNESOTA	2	2	7485	5.2	375	2	15	6505	329	1	7330	383
			IOWA	1	2	7390	5.9	433	1	28	8740	385			
			MISSOURI	1	1	8790	5.6	495	1	4	9100	509			
			DELAWARE	1	2	7450	5.3	394	1	33	8145	415	2	8475	432
			KENTUCKY	1	1	7030	5.2	365							
			UTAH	1	1	4760	5.3	251	1	3	7360	375			
			WASHINGTON	5	10	8047	5.5	437	4	20	8155	417	1	7521	420
			OREGON	2	3	8623	5.2	446	2	20	9173	503	1	8807	479

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.		
								NO. OAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
000 GUER	223289	MICHIGAN	2	4	8135	5.2	420							
	255390	MICHIGAN	1	2	7615	5.4	407	1	1	7615	407			
	262939	NEW JERSEY	1	1	5210	4.9	257							
HOL.	659049	MICHIGAN	15	31	11610	3.4	393							
JER.	335421	MICHIGAN	11	36	8649	5.3	458	1	4	8563	443	1	9974	522
001 AYR.	95005	MICHIGAN	8	8	10829	4.2	455	8	22	10368	421	1	11600	469
	102959	MICHIGAN	5	5	9692	4.0	385	5	7	9308	371	1	11864	473
	110107	MICHIGAN	6	6	8318	4.3	349	6	9	10870	439	1	11929	478
GUER	220140	MICHIGAN	6	15	7784	4.8	372							
	221148	MICHIGAN	1	5	8244	4.3	354							
	272456	MICHIGAN	7	13	7233	4.9	353	1	19	7960	381	2	8431	401
	273653	MICHIGAN	3	4	10155	3.6	363	3	17	10328	401	2	11396	421
	274638	MICHIGAN	8	13	8568	4.6	388	1	3	8700	396	2	8126	374
	275237	CONNECTICUT	1	1	8260	4.9	402							
		MICHIGAN	67	150	8149	4.7	381	12	6	9921	431	2	9553	433
		MARYLAND	1	3	6320	4.8	304	1	2	6530	308	2	11385	414
	280450	MICHIGAN	30	53	7959	4.9	386	25	10	8707	401	1	8711	406
	281510	MICHIGAN	11	27	8869	4.7	407	11	9	8718	384	2	9248	406
	282117	MICHIGAN	7	16	7686	4.9	379	1	3	9063	419	1	9450	426
	283047	NEW JERSEY	1	2	9620	5.0	480							
		MICHIGAN	46	100	7372	5.0	367	18	7	9063	413	2	9206	418
	284186	MICHIGAN	61	157	8301	5.0	413	35	9	8346	391	2	8390	398
	286916	MICHIGAN	25	50	7506	4.7	350	4	5	9008	394	1	8051	385
	296354	INDIANA	2	2	10470	4.6	497							
		MICHIGAN	150	340	8227	4.8	394	50	7	8856	397	2	9138	416
		WISCONSIN	1	1	9920	4.1	411	1	5	8240	420			
	299629	MICHIGAN	4	5	6589	4.7	307							
	300392	MICHIGAN	24	43	7786	4.7	364	21	11	8550	393	2	8345	390
	301306	MICHIGAN	4	9	8088	4.9	392							
	302853	MICHIGAN	12	34	8603	4.9	419	5	5	8641	417	3	9020	421
	306492	MICHIGAN	14	28	8725	4.8	420	6	6	10304	466	2	11133	455
	307191	MICHIGAN	51	87	8190	4.9	394	40	11	9324	413	2	9220	425
	309498	MICHIGAN	5	11	7538	4.3	323	2	9	8012	382	3	8549	400
	310166	MICHIGAN	188	371	7477	5.1	378	168	11	8889	400	2	9090	417
	311427	MICHIGAN	3	3	6653	4.9	321							
	312217	MICHIGAN	21	48	7639	5.1	384	8	5	8828	395	2	8652	389
	315591	MICHIGAN	8	16	8309	4.7	387	2	6	8934	404	1	9450	426
	316875	MICHIGAN	11	26	7031	5.2	366	4	14	8532	402	2	9320	423
	317646	NEW JERSEY	1	1	11090	4.6	514							
		MICHIGAN	67	161	8235	4.8	391	36	9	8592	396	2	8556	404
	318428	INDIANA	18	58	9321	4.9	458	11	3	8748	431	2	9821	463
	321825	MICHIGAN	3	4	8115	4.6	375	3	14	8303	369	1	8132	347
		WISCONSIN	2	6	7915	5.0	392							
	336111	MICHIGAN	13	32	7191	5.3	374	2	5	8917	439	2	8628	439
	337666	MICHIGAN	1	2	7920	5.5	435	1	15	11340	405	2	12241	451

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LBS.	TEST PCT.	FAT LBS.	305-DAY NO. DAUS.	CONTEMPORARY NO. RECOROS	MILK LBS.	FAT LBS.	YEARLY NO. RECOROS	HERD MILK LBS.	AV. FAT LBS.
	349179	MICHIGAN	34	77	8344	4.8	400	31	9	8947	394	2	9121	410
	352461	MICHIGAN	17	24	7750	4.6	359	15	12	8824	408	1	8602	392
	354485	MICHIGAN	28	56	7976	4.9	390	16	10	9463	417	2	8885	410
	357463	MICHIGAN	10	21	8675	4.7	405	10	13	9465	436	1	9262	433
	358152	MICHIGAN	43	58	6672	4.9	333	41	13	8958	389	1	9908	435
	360265	MICHIGAN	2	5	7958	4.8	376	2	17	7263	349	2	8334	399
	360631	MICHIGAN WISCONSIN	40 1	71 1	7748 5950	4.6 4.8	358 284	33 1	14 6	8614 9100	395 429	2 1	8727 7325	402 323
	361451	MICHIGAN	26	55	8024	5.0	402	26	10	8901	400	2	9757	441
	361452	MICHIGAN	1	1	7530	4.1	307	1	40	7770	370	1	7804	367
	363045	MICHIGAN	70	144	8569	4.9	419	68	12	9322	423	2	9533	436
	364846	MICHIGAN	30	53	7490	4.7	353	22	8	8814	395	1	8959	405
	364883	MICHIGAN	1	1	8680	5.2	447	1	7	7550	384	1	7804	367
	365847	MICHIGAN	3	6	7078	5.0	353	3	9	7852	370	2	9031	413
	367366	MICHIGAN	51	89	7549	5.0	370	45	11	8884	402	2	9006	413
	368868	MICHIGAN MINNESOTA	16 1	27 3	6643 6760	4.9 5.3	325 355	5 1	7 21	7658 9093	361 447	2 1	8681 8720	415 422
	370483	MICHIGAN	6	11	7770	5.0	385	6	15	9947	429	2	10910	451
	372055	MICHIGAN	7	15	8450	4.9	409	7	8	9019	422	2	9360	420
	372978	MICHIGAN	7	12	7019	4.9	346	7	8	8258	386	1	9104	412
	373630	MICHIGAN	25	48	8008	4.8	386	17	11	8429	387	1	9054	423
	378763	MICHIGAN	35	53	8647	4.6	396	35	14	9295	415	1	9586	446
	379387	MICHIGAN	4	5	9926	4.8	478	4	16	12775	508	1	11958	493
	380063	MICHIGAN	4	6	9551	5.0	480	3	7	10378	472	1	10780	488
	381357	MICHIGAN	16	27	7417	4.6	342	10	10	8556	383	2	8488	390
	394815	MICHIGAN	2	6	9417	4.6	430	2	15	9764	416	2	10407	441
	404262	MICHIGAN	21	58	7896	4.9	390	14	8	8418	383	3	8709	398
	405828	MICHIGAN	16	26	7825	5.0	388	15	6	8453	410	2	8571	421
	406551	MICHIGAN	31	62	7435	4.9	363	18	10	8836	416	2	9011	432
	408115	MICHIGAN	2	3	8105	4.9	392	2	4	8240	378	2	7843	363
	409112	MICHIGAN	6	8	5753	4.4	251	6	13	8834	372			
	411894	MICHIGAN	13	18	7705	4.9	386	13	16	9487	419	1	9836	439
	416942	MICHIGAN	5	7	7173	4.8	345	5	6	7945	388	1	8237	394
	417744	MICHIGAN	13	23	8040	4.9	389	12	9	9591	428	2	9505	422
	424794	MICHIGAN	24	51	8053	4.6	366	22	8	8664	395	2	8888	413
	428870	MICHIGAN	14	18	8025	4.9	388	14	14	7997	366	1	9723	429
	430402	MICHIGAN	5	6	6151	5.2	315	5	9	8601	394	1	8481	383
	432069	MICHIGAN	83	121	8623	5.0	431	83	13	9429	421	1	9867	445
	438411	MICHIGAN	11	14	8230	4.6	378	11	13	9171	400	1	9439	409
	440484	MICHIGAN	10	10	8236	4.8	393	10	9	8667	407	1	8791	405
	441734	MICHIGAN	2	5	9672	4.4	417	2	5	8451	381	2	8974	395
	443594	MICHIGAN	6	6	7232	4.8	348	6	14	9480	440	1	9071	408
	443991	MICHIGAN	3	4	8353	4.6	389	2	12	8233	406	1	10206	448

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY NO.	AV. MILK LB.	AV. FAT LB.	YEARLY NO.	HERO MILK LB.	AV. FAT LB.
	447144	MICHIGAN	13	27	6844	4.9	332	12	9	9096	411	2	8774	409
	459005	MICHIGAN	7	8	7589	4.6	351	6	22	8321	384	1	8589	393
	459186	MICHIGAN	12	28	8527	4.8	409	12	13	9586	440	2	9485	440
	460543	MICHIGAN	1	3	8047	5.2	419	1	25	7967	388	2	8595	411
	460803	MICHIGAN	5	5	7584	5.1	387	5	8	8916	436	1	8859	429
	461965	MICHIGAN	10	10	6860	5.0	344	8	11	8443	388	1	9573	452
	467793	MICHIGAN	27	39	9132	4.9	445	27	14	9889	431	1	10615	461
	469672	MICHIGAN	16	25	7460	4.7	354	16	10	9502	423	1	9461	422
	474743	MICHIGAN	9	10	9037	4.7	430	9	13	8857	408	1	9833	452
	475595	MICHIGAN	26	26	9345	4.8	451	23	8	10416	456	1	10849	478
	478507	MICHIGAN	8	8	9035	4.9	447	6	12	9098	424	1	9261	434
	481874	MICHIGAN	1	1	7910	4.8	375	1	3	9870	367	1	11401	434
	488725	MICHIGAN	2	4	9095	5.2	463	2	37	8545	413	1	8873	429
	490550	MICHIGAN	1	1	5680	4.3	245	1	3	6920	264			
	492314	MICHIGAN	2	2	10600	4.4	454	2	18	9220	435	1	9952	447
HOL.	679328	MICHIGAN	60	135	11955	3.6	432	23	7	12591	459	2	12375	458
	693553	MICHIGAN	39	76	10454	3.7	383	7	11	11688	451	2	11756	466
	704308	MICHIGAN	20	41	10920	3.7	405	2	10	13711	508	3	13880	519
	714974	INDIANA	1	1	10970	3.2	348	1	2	15060	507			
		MICHIGAN	111	263	12043	3.4	410	27	6	12418	457	2	12132	441
	741567	MICHIGAN	51	131	12124	3.6	437	9	7	11861	425	1	11906	432
	743887	MICHIGAN	41	107	12174	3.6	440	12	5	12652	467	2	12575	465
	757403	MICHIGAN	85	165	12354	3.5	437	47	8	11692	425	2	11837	432
		KENTUCKY	1	4	12283	3.5	432	1	8	8190	299			
	767189	INDIANA	1	5	13772	3.7	513	1	2	14185	492			
		MICHIGAN	195	467	11914	3.6	429	135	9	11963	434	2	11904	435
		WISCONSIN	1	2	13235	3.4	440	1	21	10470	397	2	9957	383
	769920	MICHIGAN	3	7	9588	3.6	338	2	14	10150	383	2	11674	445
	771389	MICHIGAN	30	62	11757	3.6	416	6	10	10480	413	2	9521	388
	779315	MICHIGAN	29	72	12205	3.5	424	7	8	11951	435	2	12367	456
	786028	MICHIGAN	3	13	12821	3.6	458							
	787141	OHIO	1	2	11590	3.4	395	1	1	15610	477			
		INDIANA	1	4	11223	3.6	400							
		MICHIGAN	92	200	11661	3.6	416	78	8	12135	444	2	11939	437
	787337	MICHIGAN	10	18	10197	3.5	354	3	9	9635	347	2	11407	417
	790337	OHIO	1	2	17380	3.6	622	1	3	15255	535	2	12165	431
		INDIANA	1	1	11620	3.0	345							
		MICHIGAN	33	78	11946	3.6	428	17	10	13183	473	2	12747	458
	793951	INDIANA	1	4	11305	3.2	363	1	1	11170	422			
		MICHIGAN	89	191	11732	3.6	417	37	7	11594	427	2	11774	433
	802505	VERMONT	1	1	10600	3.7	391							
		NEW JERSEY	1	1	9170	3.8	350							
		MICHIGAN	90	185	12057	3.7	444	26	7	12312	465	2	12113	458
		KENTUCKY	1	2	17395	3.8	652	1	7	14790	517			
	802846	PENNSYLVANIA	1	1	11690	3.5	406	1	6	15820	613			
		INDIANA	1	5	17570	3.4	603							
		MICHIGAN	110	243	12066	3.5	423	44	8	12066	440	2	11686	430
	811414	CONNECTICUT	1	1	10860	4.1	440							
		INDIANA	1	4	13573	3.1	417	1	14	12338	453	3	12383	457
		MICHIGAN	152	331	12073	3.6	432	62	7	12251	442	2	12164	444

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	AV. RECORDS NO.	YEARLY HERD LB.	AV. FAT LB.
	812779	PENNSYLVANIA	1	3	10497	3.3	344	1	11	12710	473	2	12770	466
		MICHIGAN	2	4	13807	3.4	466	1	7	13947	489	2	13544	472
		MARYLAND	1	2	12180	3.6	431	1	13	10705	410	2	10835	413
	814676	NEW JERSEY	1	1	12640	3.3	415							
		OHIO	2	2	11285	3.4	382							
		INDIANA	1	1	9670	3.5	337							
		MICHIGAN	280	701	12505	3.5	430	114	7	12075	438	2	12103	439
		ARKANSAS	1	1	8530	3.5	300							
	818734	MICHIGAN	391	659	13625	3.5	477	373	15	12115	446	1	12745	467
	820601	INDIANA	1	1	13140	3.9	517							
		MICHIGAN	194	436	11977	3.7	438	171	10	11891	430	2	12211	444
	820653	OHIO	1	3	12627	3.5	454	1	4	13403	493	1	14137	497
		MICHIGAN	223	491	11764	3.7	433	173	10	11749	431	2	12238	447
	820769	MICHIGAN	205	422	10976	3.9	428	150	9	12068	439	2	12219	449
	821042	MICHIGAN	35	93	10437	3.5	365	10	5	11812	441	2	12179	440
	822580	MICHIGAN	50	107	12403	3.6	444	40	9	12610	461	2	12902	477
		KANSAS	1	1	11670	3.2	370							
	826222	MICHIGAN	36	70	11116	3.6	394	12	10	11668	423	1	11749	437
	826709	MICHIGAN	35	78	11865	3.7	437	18	9	11069	403	2	11229	415
	832407	OHIO	1	1	9240	3.3	307							
		MICHIGAN	36	71	11744	3.6	417	3	6	10494	413	2	12134	479
	832736	MICHIGAN	12	33	13329	3.6	472	6	5	12308	442	2	11352	414
	837429	MICHIGAN	98	238	11816	3.6	420	82	9	11779	426	2	12050	435
	848314	INDIANA	1	1	17190	3.0	523							
		MICHIGAN	107	246	12265	3.5	433	72	9	11922	435	2	12372	455
	849709	MICHIGAN	180	308	11937	3.7	436	166	12	11925	435	1	12499	458
	853631	MICHIGAN	69	149	12227	3.6	439	62	9	11842	435	2	12244	449
	853901	MICHIGAN	5	15	12815	3.5	450	5	7	12428	449	3	12335	440
	857347	MICHIGAN	29	63	11867	3.8	448	29	12	12395	454	2	13032	479
	859214	INDIANA	1	1	8960	3.2	290	1	7	12020	415	1	12089	437
		MICHIGAN	7	12	10490	3.9	401	4	7	10829	390	1	12851	475
	860909	MICHIGAN	2	3	11453	3.6	409	2	7	12578	453	2	13705	467
	862256	MICHIGAN	202	434	11921	3.7	444	162	11	12481	455	2	12745	465
	871121	NEW YORK	1	1	7960	3.3	263							
		OHIO	2	5	12379	3.9	477	1	5	11500	416	2	11778	419
		MICHIGAN	228	468	11435	3.8	432	181	11	11988	458	2	12282	452
	874002	MICHIGAN	378	707	12249	3.6	438	361	11	12167	445	2	12580	462
	877526	MICHIGAN	189	418	11410	3.9	437	147	10	11981	438	2	12162	446
	884431	MICHIGAN	63	121	12939	3.4	443	49	9	12081	437	2	12286	445
	886218	OHIO	2	4	11044	3.7	405	2	30	11994	430	2	12265	424
		MICHIGAN	25	43	11118	3.7	410	23	10	11160	400	1	12000	430
	886370	MICHIGAN	38	82	11065	3.8	413	33	9	11813	429	2	11820	428
	886813	MICHIGAN	11	22	11540	3.6	413	6	8	11133	398	2	11052	399
	888340	MICHIGAN	14	35	12481	3.7	458	14	10	12777	462	2	12449	451
	889044	MICHIGAN	100	195	11564	3.6	415	80	9	11321	411	2	11669	425
	889884	MICHIGAN	9	23	11218	3.7	417	8	6	11334	412	2	11593	425
	893866	INDIANA	1	1	16470	3.9	644							
		MICHIGAN	104	206	11747	3.7	430	93	9	11890	433	2	12089	442
	900107	MICHIGAN	74	150	11920	3.6	426	62	10	12250	446	2	12296	447
	900108	INDIANA	2	4	14024	3.7	514	1	1	11000	356	1	8742	448
		MICHIGAN	147	299	12173	3.5	432	131	11	12251	446	2	12281	449
		TEXAS	1	1	8870	3.7	325							

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREEO	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERO			
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	AV. LB.
901114	OHIO		1	5	13732	3.9	533	1	6	9880	373	3	9047	357	
	MICHIGAN		184	311	12075	3.7	440	170	13	12320	452	1	12597	460	
	WISCONSIN		1	2	10400	3.7	383	1	15	9985	369	1	13680	435	
	WEST VIRGINIA		1	1	16910	3.6	606	1	29	13710	524	1	11816	443	
902800	INDIANA		1	1	14070	3.2	452								
	MICHIGAN		30	54	11994	3.6	430	29	12	11716	423	2	11966	435	
906710	OHIO		1	1	13970	3.6	499	1	4	14940	558	1	12960	477	
	ILLINOIS		1	1	13100	3.5	458								
	MICHIGAN		537	1034	13323	3.5	469	506	12	12167	446	2	12597	461	
	MISSOURI		1	4	15395	3.4	514	1	4	12170	440	4	12083	441	
	KANSAS		1	4	11873	3.7	440	1	6	9740	385	2	11527	439	
	NORTH CAROLINA		1	1	10330	2.9	295								
906714	ILLINOIS		1	1	9760	3.8	366	1	25	12380	463				
	MICHIGAN		215	360	11709	3.6	424	208	14	12095	442	1	12789	467	
	KANSAS		1	1	11500	4.3	489								
	FLORIDA		1	1	13250	3.5	462	1	4	11040	441	1	9461	368	
907503	MICHIGAN		5	13	12555	3.6	453	3	15	12042	424	2	11976	425	
910825	MICHIGAN		30	78	13839	3.6	498	21	8	13145	489	2	12964	476	
912891	INDIANA		1	1	12140	3.6	437								
	MICHIGAN		37	69	11620	3.5	399	23	11	12211	443	1	11903	429	
915645	NEW JERSEY		1	1	12470	4.1	506								
	MICHIGAN		177	380	11935	3.6	430	119	9	12180	443	2	12593	458	
	NEBRASKA		1	3	12093	3.3	405	1	12	11325	458	2	10514	407	
	TEXAS		1	3	11323	3.4	390	1	2	11777	420	2	11750	429	
	COLORADO		3	5	13720	3.5	475	3	4	14138	533	1	13582	512	
917518	MICHIGAN		162	300	12419	3.7	458	154	11	11979	436	2	12815	470	
	FLORIDA		2	3	14335	3.6	504	2	4	13268	480	1	9461	368	
918457	MICHIGAN		2	3	10723	3.8	404	2	22	11830	422	2	11879	423	
919745	MICHIGAN		10	21	12783	3.5	444	10	8	12792	468	2	12611	449	
	MISSOURI		1	6	13852	4.3	598	1	5	11680	417	5	12129	444	
919746	MICHIGAN		13	27	13213	3.4	444	11	8	11713	428	2	12433	439	
922243	MICHIGAN		175	290	11827	3.7	429	164	11	11991	438	1	12163	446	
923599	MICHIGAN		6	7	11046	3.5	387	4	24	12145	425	1	11707	404	
924893	MASSACHUSETTS		1	2	15240	3.6	541	1	10	12825	459	2	13876	510	
	OHIO		1	3	11557	3.6	419	1	7	13405	479				
	INDIANA		1	1	10250	3.2	333	1	12	14180	470	1	13233	458	
	MICHIGAN		313	518	12408	3.6	447	304	13	12332	447	1	12724	460	
926864	OHIO		1	1	12800	3.7	474								
	MICHIGAN		36	106	12568	3.5	443	8	11	12441	462	2	12603	468	
933405	MICHIGAN		19	29	10373	3.8	391	17	15	11030	409	1	11787	437	
942567	INDIANA		1	1	10900	3.6	397								
	MICHIGAN		31	66	11750	3.5	404	29	9	11917	432	2	12070	441	
946403	NEW JERSEY		2	2	13760	3.7	504	1	23	13620	505	1	14900	540	
	INDIANA		1	2	12080	3.7	440	1	3	13415	519	2	10851	407	
	MICHIGAN		389	709	12004	3.6	435	375	13	12338	452	2	12720	466	
	TEXAS		1	2	14025	4.1	568	1	7	13415	529	2	9985	399	
947935	MICHIGAN		41	65	12210	3.9	467	38	17	12008	438	2	12633	460	
	FLORIDA		1	1	9160	3.5	318								
948770	MICHIGAN		30	52	11525	3.7	422	28	11	11929	437	2	11837	436	
954675	OHIO		1	1	11790	4.0	472	1	4	15490	565	1	12960	477	
	INDIANA		1	1	14750	3.6	527	1	7	13860	470	1	14050	493	
	MICHIGAN		441	685	13459	3.6	481	422	15	12502	459	1	13085	478	
	IOWA		1	2	11990	4.0	477	1	33	14825	559	2	13483	525	
955554	MICHIGAN		10	16	12608	3.5	434	10	21	12434	457	1	13220	482	
956714	OHIO		1	2	12015	3.5	421	1	13	11140	420				
	INDIANA		1	1	17540	4.0	701	1	10	14510	546				
	MICHIGAN		360	495	12341	3.9	474	354	15	12501	458	1	13133	482	
960811	MICHIGAN		22	40	11378	3.5	398	22	15	11559	424	2	13292	482	
966471	NEW JERSEY		1	1	8510	3.5	294	1	4	8660	339	1	9516	352	
	OHIO		1	1	12450	3.8	471	1	7	14800	547	1	13429	498	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE MICHIGAN	DAUGHTERS NO. 176	RECORDS NO. 334	MILK LB. 12267	TEST PCT. 3.7	FAT LB. 453	305-DAY CONTEMPDRARY				YEARLY HERO			
								NO. DAUS.	RECORDS NO.	MILK LB. 11969	FAT LB. 430	RECORDS NO. 2	MILK LB. 12341	FAT LB. 446	
	966473	INOIANA MICHIGAN	1 42	1 87	8320 11935	3.4 3.6	285 429								
	970859	MICHIGAN	46	83	12141	3.6	433	41	10	11686	430	2	12175	441	
	980066	NEW JERSEY MICHIGAN	1 38	2 82	14615 12068	4.4 3.7	640 438	38	8	11663	424	2	11265	419	
	981361	MICHIGAN IOWA MARYLAND KENTUCKY	280 1 1 2	343 2 1 2	12853 18550 7510 12635	3.7 3.5 3.5 4.3	472 635 263 533	267 1 1 2	17 33 19 15	12622 14605 11910 12990	462 554 428 467	1 2 1 1	13336 13701 9592 12906	487 533 352 458	
	991740	MICHIGAN	30	52	12357	3.7	456	29	15	11898	437	1	12450	452	
	993753	OHIO MICHIGAN	1 38	1 65	10240 11332	3.3 3.9	342 437								
	994250	MICHIGAN	126	201	12386	3.7	452	124	15	12419	450	1	13020	472	
	999907	MICHIGAN	125	192	10328	3.6	373	121	16	11925	434	1	12226	446	
	1000156	MICHIGAN	11	20	12232	3.9	471	11	11	11788	452	2	12139	445	
	1005475	MICHIGAN	14	26	10493	4.0	417	13	14	12667	470	2	13271	488	
	1005476	MICHIGAN	82	106	12230	3.8	461	79	19	12452	465	1	12933	479	
	1009709	MICHIGAN MARYLAND	274 1	372 1	12295 7960	3.6 3.6	438 288	269 1	15 35	11968 10910	439 392	1	12773	470	
	1017879	MICHIGAN	46	59	12454	3.7	452	43	14	12395	455	1	12605	463	
	1020972	MICHIGAN MARYLAND	10 1	13 1	13469 12210	3.8 3.5	513 431	10 1	22 35	12482 10780	460 388	1 1	12982 9592	480 352	
	1023558	MICHIGAN	218	288	11840	3.7	431	211	17	12473	457	1	13026	477	
	1029659	MICHIGAN IOWA ARIZONA	883 2 1	1261 3 3	13173 11738 17493	3.7 3.8 3.4	480 442 604	860 2 1	14 38 58	12544 14588 13100	461 540 477	1 2 3	13188 12693 12052	483 491 447	
	1032144	MICHIGAN ARIZONA	252 2	356 2	11802 15210	3.7 3.5	431 527	241 2	15 8	12290 14155	452 483	1 1	12827 12617	472 425	
	1032383	MICHIGAN	2	6	8258	3.7	300	2	13	10155	392	3	12684	470	
	1032435	MICHIGAN	240	329	12245	3.6	442	229	15	12046	445	1	12838	472	
	1035326	MICHIGAN	40	79	11292	3.7	419	40	14	11718	426	2	12503	458	
	1039454	MICHIGAN	190	298	12245	3.6	437	180	15	12123	444	1	12889	472	
	1044036	MICHIGAN	36	42	11752	3.8	443	34	16	11590	424	1	12419	457	
	1046733	MICHIGAN	11	11	11870	3.7	444	11	15	14566	541	1	13792	510	
	1047073	MICHIGAN	7	9	11536	3.7	426	7	15	13354	492	1	14605	522	
	1048340	MICHIGAN IOWA	198 1	227 2	13284 15395	3.5 3.7	461 563	193 1	16 35	12633 15050	466 570	1 2	13203 14230	485 541	
	1048342	INDIANA ILLINDIS MICHIGAN WISCONSIN VIRGINIA GEORGIA ARIZONA	84 5 31 1 1 2 1	155 11 40 1 2 2 2	14310 13923 11953 12210 16655 17885 14240	3.7 3.7 3.6 3.7 3.8 3.7 3.7	523 509 430 457 634 647 526	79 5 22 1 2 2 1	8 18 9 19 50 21	13825 14202 12788 15090 15270 13005	521 542 466 573 571 454	2 2 1 2 1 2	13621 13928 13775 14203 14780 12257	514 512 504 538 535 434	
	1048909	MICHIGAN	31	41	12035	3.7	448	31	19	12650	464	1	13236	480	
	1051232	MICHIGAN IOWA MARYLAND ARIZONA	575 1 1 1	906 1 1 2	12638 9180 11950 11305	3.7 3.6 3.8 3.4	465 329 449 379	552 1 1 1	14 41 19 86	12311 14410 11680 12665	450 522 418 448	1 1 1 2	12770 12513 8589 12792	467 485 320 445	
	1053895	NEW YDRK OHIO MICHIGAN IOWA	1 1 708 1	1 2 924 1	10280 9965 12612 12860	3.6 3.3 3.6 4.1	371 335 456 523	1 1 686	29 13 16	11040 11285 12553	422 426 461	1 1 1	10355 13188 11652	395 484 450	

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV. FAT LB.	YEARLY HERO		AV. FAT LB.
								NO. DAUS.	RECORDS NO.	MILK LB.		NO.	MILK LB.	
	1063673	MICHIGAN	2	2	7050	3.5	239	1	1	7570	314	1	13200	460
	1065435	MICHIGAN	4	6	11557	3.6	408	4	11	12298	501	3	12927	465
		ARKANSAS	1	2	11685	3.4	394	1	34	10500	370			
	1066446	MICHIGAN	1	1	11120	3.9	435	1	11	10750	362	1	9723	343
	1068984	MICHIGAN	123	125	12692	3.5	447	120	15	12530	460	1	13711	503
	1070209	MICHIGAN	116	142	11924	3.6	428	112	17	12394	450	1	13116	477
	1078357	MICHIGAN	28	44	11013	3.6	388	27	16	11986	444	1	12393	460
	1079569	MICHIGAN	5	11	13014	4.0	523	5	21	11356	443	2	13105	491
	1083838	MICHIGAN	54	68	13413	3.7	489	53	16	13072	478	1	13406	491
	1091670	MICHIGAN	19	19	13945	3.5	485	17	14	12649	461	1	13775	504
	1098427	MICHIGAN	67	67	12860	3.7	474	65	13	12637	466	1	13240	488
	1117412	MICHIGAN	58	58	13127	3.7	479	54	15	12572	454	1	13367	485
	1127120	MICHIGAN	22	22	11912	3.9	458	21	14	12331	463	1	13103	485
	1127694	OHIO	1	1	10910	3.4	374	1	4	14620	512	1	11979	443
		MICHIGAN	380	401	12373	3.6	450	369	16	12671	467	1	13355	489
	1135455	MICHIGAN	2	6	10372	3.6	375	2	22	11469	410	2	11484	406
	1144034	MICHIGAN	22	22	12905	3.7	474	19	7	12310	440	1	12689	462
	1155894	MICHIGAN	1	2	14315	4.1	576	1	12	12365	508	2	13206	542
	1155944	MICHIGAN	38	38	12010	3.5	428	34	14	12758	462	1	13696	497
	1176826	MICHIGAN	4	4	9193	4.5	421	3	2	11293	397	1	12880	513
	1263007	MICHIGAN	11	11	11372	3.5	399	5	3	12050	428	1	14548	524
		VIRGINIA	1	1	13570	3.3	445	1	5	9500	367			
JER.	360122	MICHIGAN	16	35	6871	5.5	374							
	381856	MICHIGAN	12	28	7270	5.2	372	3	4	6850	360	2	8137	403
		WISCONSIN	1	1	5270	6.4	337							
	394891	MICHIGAN	75	186	7851	5.3	415	19	7	8243	419	2	8348	424
	417734	MICHIGAN	6	21	7479	5.0	367							
	424606	MICHIGAN	3	5	8437	5.4	452	3	7	8785	461	1	9187	466
	426727	MICHIGAN	2	6	8363	5.7	477							
	429793	MICHIGAN	10	17	6802	5.2	346	6	9	8038	403	2	8103	419
	433856	MICHIGAN	9	17	7553	5.2	393	4	16	9177	426	1	11750	467
	435408	MICHIGAN	2	3	6380	4.4	277	1	10	6250	323	2	7810	410
	444841	MICHIGAN	21	34	7225	5.4	391	6	16	7228	357	1	7301	375
	445664	MICHIGAN	50	76	7319	5.1	369	22	13	7542	382	1	8139	407
		KENTUCKY	16	48	8561	5.0	425							
	454499	MICHIGAN	8	12	7630	5.3	405	5	8	8005	417	2	7945	399
	456437	MICHIGAN	33	74	6877	5.5	373	7	9	7688	383	2	7716	397
	457905	MICHIGAN	55	132	8341	4.9	408	13	6	7886	374	2	7987	388
	464461	MICHIGAN	8	14	7070	4.8	346	7	9	6965	359	1	8374	407
	467771	MICHIGAN	29	64	7820	5.0	386	8	7	7614	388	2	7440	374
		ALABAMA	1	1	3810	5.3	202							
	468989	OHIO	1	4	6268	5.1	317							
		MICHIGAN	16	34	8040	5.1	407	10	8	7332	368	2	7463	386
	470987	MICHIGAN	15	22	6716	5.5	372	9	8	8101	412	1	8004	425
	474206	MICHIGAN	1	3	7383	4.3	317	1	3	6363	325	2	6965	366
	474642	MICHIGAN	16	26	6829	5.3	366	5	10	7201	360	2	7760	389

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY NO.	RECORDS NO.	MILK LB.	FAT LB.	YEARLY HERD NO.	MILK LB.	AV. FAT LB.
		475879	MICHIGAN	1	2	9030	4.2	369							
		475931	NEW YORK MICHIGAN	4 6	5 12	10510 6996	5.7 4.9	594 343	4 4	49 12	9425 6714	529 340	2	7663	380
		477746	MICHIGAN	39	75	8405	5.0	414	20	6	7526	388	2	7653	396
		480625	MICHIGAN	2	3	6935	4.7	326							
		485146	MICHIGAN	9	18	7967	5.1	402	3	10	7276	372	2	7585	394
		486930	MICHIGAN	11	21	9020	4.8	433	3	6	8681	460	2	8312	432
		492137	MICHIGAN	16	25	7210	5.2	374	11	13	8355	455	1	7862	401
		493054	MICHIGAN	24	51	6957	5.1	351	18	17	7563	385	2	7980	409
		497361	MICHIGAN	23	43	7998	4.9	390	19	13	7838	392	1	8082	404
		497576	MICHIGAN	57	88	7951	5.2	414	38	13	7656	386	1	8244	412
		497929	MICHIGAN	5	8	7592	5.3	397	4	14	7063	380	1	7699	409
		500215	DHID MICHIGAN	3 17	3 18	4400 6824	4.5 5.2	196 357	2 10	5 18	5500 7864	289 407	1 1	8611 8653	420 449
		508399	MICHIGAN	47	61	8210	5.1	419	35	15	7546	386	1	8251	417
		534600	MICHIGAN	9	9	6237	5.4	339	6	17	8115	417	1	8742	453
		545277	NEW YORK MICHIGAN	1 1	1 2	5130 13200	5.1 5.3	260 677	1 1	6 8	8010 6845	405 368	1	8066	413
		550506	MICHIGAN	16	25	7806	5.0	389	11	13	7630	385	1	8171	400
		562352	MICHIGAN	7	10	8683	5.3	457	5	9	8042	419	1	7785	410
		567397	MICHIGAN	10	13	6905	4.8	331	5	15	8925	454	1	8598	451
8. S.		61563	INDIANA MICHIGAN	4 2	10 2	9524 6115	4.4 4.2	416 266	3 1	2 10	9623 9370	385 352	2 1	9436 8001	400 299
		71489	MICHIGAN	37	62	10947	3.8	411	28	8	10374	398	1	10825	420
		75321	MICHIGAN	9	17	8933	4.2	377	3	12	11405	425	2	12205	480
		89585	DHID MICHIGAN	1 17	1 31	9600 11602	4.3 4.0	412 461	1 5	16 11	10720 10788	445 420	1 1	10137 11680	396 462
		93493	MICHIGAN	15	24	10386	4.0	418	4	14	11929	465	1	11846	467
		101158	MICHIGAN	20	27	11529	4.0	451	10	6	10222	394	1	11695	458
		102994	MICHIGAN	6	6	11112	4.0	432	3	8	10537	432	1	11816	472
		109191	MICHIGAN	4	5	12505	3.7	468	3	30	11517	460	1	11946	481
M. SH		22359	MICHIGAN	3	5	10932	3.7	406	2	8	10345	380	1	9102	327
R. D.		0597	ALASKA	1	2	8495	4.4	368							
		28	MICHIGAN	5	5	8944	4.0	355	2	6	9475	358	1	11086	436
		29	MICHIGAN	6	9	10815	4.1	440	4	3	10819	405	1	11572	439
002	GUER	182899	MICHIGAN	1	1	10000	3.7	368							
		281869	INDIANA MICHIGAN	1 7	1 18	7590 8091	5.0 4.9	379 398	1	2	9390	473	1	8567	407
	HOL.	724856	INDIANA MICHIGAN	4 25	11 83	10603 12584	4.1 3.7	431 465	3	5	13912	517	2	13320	504
003	JER.	361013	MICHIGAN	16	37	7948	5.2	410	1	8	7877	408	2	8857	470
004	GUER	311797	MICHIGAN	8	16	7393	5.1	376							
	HOL.	707421	MICHIGAN	22	76	12456	3.4	422	4	4	13405	480	3	11968	441
	JER.	383885	MICHIGAN	15	50	8143	5.3	425	3	2	8469	451	1	9850	518

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.			
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	NO. RECDROS	MILK LB.	FAT LB.	
000	GUER	189889	WISCONSIN	5	9	7638	5.1	389								
		199865	WISCONSIN	6	12	6080	4.7	287								
		213597	WISCONSIN	2	3	8323	4.6	383								
		215580	MINNESOTA	3	3	8337	4.5	376								
		269867	MICHIGAN	1	1	7550	5.0	376								
			WISCONSIN	7	16	9345	4.6	426	1	3	8308	418	2	9189	442	
			MINNESOTA	1	1	8630	4.5	390	1	2	8570	393	1	6224	264	
			IOWA	1	6	11093	4.4	491	1	5	8902	421	1	9592	437	
		277302	WISCONSIN	5	7	7659	4.2	315								
		HOL.	588786	WISCONSIN	2	2	11165	3.4	374							
			617728	INDIANA	5	19	9735	3.3	315							
				ILLINOIS	1	1	12860	3.4	436							
				WISCONSIN	4	9	11410	3.5	391							
				NORTH CAROLINA	1	2	7485	2.9	216							
			620987	PENNSYLVANIA	1	4	11930	3.5	417							
				ILLINOIS	1	3	21233	3.0	731							
				WISCONSIN	16	47	12598	3.7	464	2	4	12511	456	1	13680	529
				IOWA	1	2	15770	3.2	511							
				TEXAS	1	1	12600	3.2	407							
	671379	WISCONSIN	28	105	11188	3.6	406	5	10	11485	413	2	11376	407		
		NEBRASKA	1	1	13600	3.5	477									
	693386	PENNSYLVANIA	1	2	11025	3.8	421									
		OHIO	2	5	8492	3.1	261									
		INDIANA	2	2	9255	3.4	314									
		ILLINOIS	3	13	13542	3.5	471	1	6	12327	466	2	12481	489		
		WISCONSIN	27	97	11877	3.6	424	3	5	11989	426	1	11031	398		
		MINNESOTA	3	5	11775	3.5	413									
		IDAHO	1	2	16240	3.3	528									
	698104	WISCONSIN	2	3	13093	3.6	465									
	707767	ILLINOIS	4	9	15063	3.4	506	3	9	13588	516	2	13882	524		
		WISCONSIN	3	3	9013	3.8	336									
	720340	WISCONSIN	2	4	10265	3.6	364									
	774673	WISCONSIN	1	4	11955	3.7	442									
	776500	WISCONSIN	3	9	9572	3.6	340									
	JER.	328987	WISCONSIN	5	13	7450	4.8	361								
001	GUER	295425	MICHIGAN	5	7	7643	4.8	369								
		403063	WISCONSIN	3	5	7246	5.1	353	3	4	7238	343	1	7514	360	
		411574	WISCONSIN	1	1	7560	5.3	401	1	4	8850	418				
		446009	WISCONSIN	1	1	6730	4.6	312	1	7	5280	271	1	7794	382	
	HDL.	972097	WISCONSIN	2	3	10173	3.6	363	2	19	12483	446	2	11631	413	
			MISSOURI	1	3	10290	3.8	347	1	5	11180	393	2	10633	356	
		983740	ILLINOIS	1	1	13990	4.0	556	1	12	13690	523	1	12938	489	
			LOUISIANA	10	11	11818	3.7	432	10	10	13495	482	1	12546	447	
				1	5	8814	3.5	308	1	10	9466	332	4	8772	311	
		1035577	WISCONSIN	6	8	13338	3.3	433	6	13	12603	456	1	12921	460	
		1037696	WISCONSIN	3	3	12010	3.0	355	2	20	11565	414	1	11245	395	
		1053320	WISCONSIN	6	9	11014	3.5	389	5	13	13149	476	1	12279	436	
			VIRGINIA	1	1	11480	3.9	450	1	14	14410	775	1	13647	469	
			ARKANSAS	1	1	8640	3.7	323	1	25	9280	374				
		1059840	ILLINOIS	1	2	16460	3.4	558	1	45	14925	551	1	14443	542	
			WISCONSIN	6	7	12759	3.4	424	6	9	13029	458	1	13723	474	
		1094296	WISCONSIN	5	8	13468	3.7	496	4	14	13066	484	1	12121	453	
			IOWA	1	2	10995	3.9	426	1	17	10410	422	2	11107	440	
		1120619	WISCONSIN	5	6	13975	3.6	507	5	12	11819	426	1	12136	434	
		NORTH CAROLINA	1	2	10905	3.7	400	1	4	10090	434	1	10093	459		
		KENTUCKY	1	1	9410	3.6	340	1	5	9230	344					

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
002	GUER	1133271	WISCONSIN	4	4	13298	3.6	479	3	8	15593	534	1	14682	508
		1150650	ILLINOIS	2	2	13225	3.6	469	2	19	13490	512	1	12682	477
			WISCONSIN	1	2	11120	3.6	394	1	18	10015	355	2	10759	375
		1202125	WISCONSIN	1	1	16740	3.5	590	1	4	17220	640	1	17647	640
		1245671	MINNESOTA	1	1	12820	4.2	542	1	20	13360	510	1	12906	476
		197999	WISCONSIN	4	5	8134	4.8	382							
		201423	WISCONSIN	1	5	7570	4.2	319							
		209349	WISCONSIN	10	25	6825	4.9	328	4	11	7535	333	2	6949	319
		217016	MICHIGAN	1	1	6220	4.8	296							
			WISCONSIN	7	30	8237	4.8	396	5	4	8932	409	3	8780	404
		222983	WISCONSIN	1	7	9341	4.2	391	1	5	8116	382			
		225965	WISCONSIN	2	3	7198	5.4	381							
		230929	WISCONSIN	20	48	7922	4.7	371	8	6	8451	382	2	8325	389
		233113	WISCONSIN	19	42	7239	5.0	363	5	10	8305	390	2	8215	381
		234814	WISCONSIN	17	38	6854	4.9	331	10	7	7866	349	2	7762	362
		239142	WISCONSIN	1	3	7657	4.6	354	1	17	8640	411	2	8938	427
		247402	WISCONSIN	22	53	8202	4.5	366	16	8	8520	386	1	8367	386
			NEBRASKA	1	1	4630	4.5	209							
		250675	WISCONSIN	4	10	7158	4.8	341							
		250676	WISCONSIN	21	87	7714	4.6	351	8	12	8312	383	1	7886	374
		251765	WISCONSIN	4	9	8241	5.0	408							
		254482	ILLINOIS	1	3	8830	4.7	415							
			MICHIGAN	1	1	8820	5.5	488							
			WISCONSIN	7	18	8391	4.7	392	6	9	8215	379	2	8065	372
		271038	WISCONSIN	5	16	6660	4.6	312							
		274911	WISCONSIN	6	20	6956	4.8	334	4	6	7861	380	2	7712	368
		276283	MAINE	1	2	8445	5.1	427	1	9	8635	424	2	9173	452
			OHIO	1	1	10000	5.0	500							
			INDIANA	1	3	9877	5.2	516							
			ILLINOIS	1	1	10610	5.0	527							
			WISCONSIN	19	39	7559	4.7	353	1	13	8240	386	1	8339	382
			MINNESOTA	1	2	11890	4.6	540	1	8	9285	410	1	7663	385
			ARIZONA	5	12	8460	4.8	403							
			CALIFORNIA	14	23	8596	4.7	399	5	56	8460	405			
		281341	WISCONSIN	2	4	7498	5.2	387	1	10	7550	383	1	7543	376
		282113	WISCONSIN	5	10	7733	4.6	355	2	7	9053	394	1	9031	379
		285113	WISCONSIN	18	39	6648	4.6	303	7	6	7354	345	1	7400	353
		285666	WISCONSIN	10	22	6651	4.7	313	7	11	8060	353	2	7522	342
		285839	WISCONSIN	12	27	6490	5.0	319	11	6	7992	368	2	8002	373
		289537	WISCONSIN	3	7	6863	5.0	341	1	6	7620	364	1	6540	319
		291450	WISCONSIN	20	56	7196	4.9	353	19	9	7780	357	2	7745	354
		294995	WISCONSIN	6	17	6427	5.3	337	3	9	7107	321	2	7304	329
		295895	ILLINOIS	1	2	6725	4.7	317							
			WISCONSIN	11	23	8666	4.4	378	4	8	7777	358	1	7548	352
		299618	WISCONSIN	7	20	7489	4.8	357	2	9	8507	403	1	7706	371
		305687	WISCONSIN	14	37	7044	4.6	324	6	5	7424	359	2	5936	268
			NEBRASKA	1	8	8433	5.3	441	1	4	9234	419	3	7379	352
		318308	ILLINOIS	1	1	6710	4.0	271							
			WISCONSIN	7	21	7106	4.9	343	5	10	8302	382	2	6546	311
		319865	WISCONSIN	48	120	7310	4.9	359	34	9	7957	368	1	7992	373

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY DAUS. NO.	CONTEMPORARY RECORDS NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
	321378	WISCONSIN	67	140	7497	4.9	363	58	9	8072	372	2	8158	377
		FLORIDA	1	1	8990	4.3	391	1	4	6500	282	1	7085	307
	324066	MICHIGAN	1	1	9090	4.0	360							
		WISCONSIN	21	59	7246	5.1	364	14	7	8412	377	2	8127	384
	324380	WISCONSIN	28	43	8275	4.9	403	25	10	8431	389	1	8353	387
		IOWA	1	2	8955	4.6	409							
		SOUTH DAKOTA	1	1	5820	4.6	270							
	331096	WISCONSIN	5	7	6829	4.5	310	4	7	9019	408	2	8504	395
	332856	WISCONSIN	49	110	7391	4.7	343	38	7	7937	358	2	8321	376
	334587	WISCONSIN	13	23	7546	4.9	362	12	7	7112	340	1	7604	356
	337155	WISCONSIN	1	4	7375	4.2	306	1	6	7913	363	1	8371	372
	340794	WISCONSIN	19	44	8363	4.9	404	14	7	8063	359	1	8361	383
	341233	MICHIGAN	1	2	13980	5.8	699	1	15	15750	773			
		WISCONSIN	15	39	6948	4.6	320	14	8	8077	368	3	8496	384
	341503	MICHIGAN	3	4	10043	5.2	562	3	14	10847	504	1	8704	387
		WISCONSIN	36	74	7315	5.0	358	32	9	8232	375	2	8237	382
	342716	WISCONSIN	8	29	8098	4.5	358	7	13	7838	368	2	8366	391
	343131	MICHIGAN	1	2	5095	5.6	275	1	9	8985	349	2	9570	399
		WISCONSIN	16	28	8175	4.9	403	10	12	9444	434	2	9459	424
		IOWA	1	1	8750	5.0	440	1	3	7120	343	1	9625	456
	343148	WISCONSIN	19	53	7813	4.7	369	13	5	8089	376	2	7980	374
	348783	MICHIGAN	1	1	5620	4.8	269	1	16	16160	796			
		WISCONSIN	45	77	7857	4.7	367	44	10	8381	366	1	8530	395
		FLORIDA	1	1	4290	4.3	185	1	6	6820	297			
	349877	WISCONSIN	2	7	7096	4.5	318	2	10	7285	332	1	7363	348
	354789	WISCONSIN	17	32	6609	4.8	321	12	8	7951	370	2	7778	368
	358092	MICHIGAN	1	1	7120	4.9	351	1	30	6540	310			
		WISCONSIN	18	27	6976	4.9	338	17	9	8567	388	1	7833	363
	363323	WISCONSIN	25	61	7139	4.8	337	16	8	7721	360	2	7998	376
		IOWA	1	3	8347	4.3	358	1	5	10230	488	2	9434	447
	364803	PENNSYLVANIA	1	2	9370	5.2	482	1	2	9460	469			
		MICHIGAN	2	3	8020	4.3	339	1	9	7915	341	1	10704	448
		WISCONSIN	51	77	8314	4.7	385	47	12	8384	398	1	8236	393
		IOWA	5	12	9859	4.6	449	4	4	8291	457	2	9086	445
	371457	WISCONSIN	12	20	7641	4.4	337	12	8	8229	385	1	8159	387
	372372	MICHIGAN	1	1	5560	5.4	303	1	3	8790	416			
		WISCONSIN	19	34	8086	4.8	386	19	10	8271	374	2	8230	389
		IOWA	4	13	9317	4.7	434	4	6	8775	416	2	8557	405
		NEBRASKA	1	2	8270	5.0	415	1	21	8540	396	2	6758	294
	372762	WISCONSIN	9	14	6576	4.9	320	7	8	9401	372	1	9091	375
		MISSOURI	3	4	6192	5.0	309							
		LOUISIANA	2	7	6583	4.6	302	1	74	6724	310	2	6442	297
		OKLAHOMA	2	2	7545	5.5	412							
	376428	WISCONSIN	9	14	8480	4.9	410	6	11	9442	435	1	9231	436
	379457	MASSACHUSETTS	1	1	13660	4.5	611	1	20	9210	464			
		NEW YORK	1	1	9860	4.8	478							
		PENNSYLVANIA	4	7	7854	4.9	382	3	12	7428	361	1	8275	396
		OHIO	30	63	8206	4.6	380	18	10	9159	417	2	9004	403
		INDIANA	1	3	9020	4.3	388	1	2	8740	403	2	7881	381
		NEW MEXICO	1	6	8645	5.0	433	1	16	8325	423	1	8077	387
	391684	MICHIGAN	2	2	8400	4.4	373	2	10	7960	369	1	8393	372
		WISCONSIN	9	12	9435	4.7	436	9	16	9546	440	1	9496	442
		MINNESOTA	3	8	8483	5.2	448							
	397313	ILLINOIS	1	1	7540	4.9	366	1	7	8750	398			
		WISCONSIN	24	45	9071	4.9	442	24	12	8638	425	2	9222	443
	400613	MICHIGAN	1	1	8370	4.2	350							
		WISCONSIN	11	13	8940	4.5	402	11	11	8541	404	1	8622	406

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAS.	CONTEMPORARY NO.	AV. MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
	401801	MASSACHUSETTS WISCONSIN	1 25	1 60	10040 8294	4.8 4.6	477 382	1 24	115 11	14970 8653	552 398	1 2	14028 8735	531 408
	406136	WISCONSIN	32	71	7787	4.8	376	32	7	8453	384	2	8270	385
	409783	WISCONSIN	24	46	6774	5.3	354	22	8	8113	380	2	7873	373
	411383	WISCONSIN	26	54	7186	4.9	350	25	10	8224	371	2	7907	371
	411385	WISCONSIN	19	42	6968	4.6	321	19	8	7819	357	2	7624	357
	415426	MICHIGAN WISCONSIN	6 32	7 70	6783 7086	5.2 4.5	345 356	5 28	9 11	7911 8048	362 376	1 2	8782 8319	396 380
	415428	WISCONSIN	22	45	7625	4.8	366	21	8	8428	384	2	8451	388
	417357	WISCONSIN	15	37	7508	4.8	355	15	8	7843	362	2	7941	373
	419240	ILLINOIS WISCONSIN	2 20	4 35	7028 7315	4.2 4.5	293 329	2 16	12 9	8010 7820	380 360	2 2	7740 7945	357 364
	426151	WISCONSIN	18	33	6676	4.6	307	17	10	8248	370	2	8094	366
	427978	WISCONSIN	8	11	8092	4.9	396	7	13	9078	421	1	9245	438
	428868	WISCONSIN	9	9	9201	4.6	417	9	14	9168	423	1	9862	460
	430265	WISCONSIN	29	33	9059	5.0	447	28	11	8803	420	1	9175	437
	436268	MICHIGAN WISCONSIN	3 32	4 43	7615 8644	4.4 4.6	342 393	3 31	14 13	9675 9458	421 428	1 1	8393 9571	372 441
	440498	MICHIGAN WISCONSIN	1 12	1 13	6150 9091	4.8 4.7	293 420					1 1	9014 9820	402 464
	449173	MICHIGAN WISCONSIN	1 8	1 10	7810 8384	5.1 5.3	400 443	1 8	6 15	8160 8671	337 412	1 1	10704 9532	448 457
	449589	WISCONSIN	2	2	8465	4.9	417	2	24	9400	434	1	9603	444
	467419	NEVADA CALIFORNIA	1 1	1 2	5630 5930	4.9 4.9	277 286							
	474044	MICHIGAN WISCONSIN	1 12	1 16	5560 7492	4.3 5.0	237 377	1 12	11 14	16100 8740	749 396	1	8849	417
	489360	MICHIGAN WISCONSIN	1 8	1 11	8120 7642	4.1 4.8	331 364	1 8	11 11	15870 9110	741 415	1	9441	429
	500170	MICHIGAN WISCONSIN	1 22	1 32	9420 8664	4.1 4.9	387 426	1 22	15 13	8290 9103	383 416	1 1	8393 9334	372 426
	500172	MICHIGAN WISCONSIN	2 35	2 43	6440 8392	4.7 4.8	289 405	2 35	11 15	8565 9494	365 430	1 1	9549 9657	410 448
HOL.	669721	NEW JERSEY PENNSYLVANIA WISCONSIN	1 1 67	1 1 186	10410 7170 11383	3.1 3.6 3.3	325 257 371							
	669877	WISCONSIN MISSOURI	18 1	55 1	10662 9130	3.5 3.3	371 297	3	7	11933	408			
	679187	WISCONSIN	45	120	11065	3.3	363	10	7	11936	419	1	10926	383
	707706	WISCONSIN	6	15	11385	3.3	370	2	13	12280	430	2	11189	378
	714571	WISCONSIN	18	56	11402	3.3	371	1	7	11360	375			
	717420	PENNSYLVANIA WISCONSIN MISSOURI VIRGINIA	1 49 1 1	2 134 1 1	7645 10132 11780 8450	3.4 3.5 3.7 3.7	259 351 441 315							
	717785	MAINE WISCONSIN	1 35	1 94	16250 11982	3.5 3.4	568 404							
	718344	NEW JERSEY ILLINOIS MICHIGAN WISCONSIN MARYLAND TENNESSEE	1 1 1 169 1 1	5 5 1 551 1 1	11552 13368 12600 12026 9990 14400	3.3 3.7 3.4 3.4 3.5 3.1	378 492 424 409 349 440							
	746399	WISCONSIN	1	2	11615	3.4	393							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAS.	CONTEMPORARY RECORDS NO.	MILK LB.	AV. FAT LB.	YEARLY HERD RECORDS NO.	MILK LB.	AV. FAT LB.
	748385	PENNSYLVANIA	2	4	9015	3.8	331	1	6	11550	411	2	11440	415
		INDIANA	2	4	15523	3.6	550	2	4	14223	484	1	12491	433
		ILLINOIS	2	2	12355	3.9	483	1	2	13480	430			
		WISCONSIN	141	453	11885	3.5	419	90	10	12127	433	2	12119	434
	756640	ILLINOIS	1	1	8780	3.9	338							
		WISCONSIN	152	381	11532	3.4	395	79	9	11556	409	2	11152	400
		NORTH CAROLINA	2	8	12594	3.5	432	2	10	10612	366	3	10835	370
	767776	ILLINOIS	1	1	13640	3.2	430							
		WISCONSIN	6	13	9743	3.7	369	1	4	9980	365	1	8088	307
	769578	MICHIGAN	1	1	14840	3.7	552	1	17	14950	563			
		WISCONSIN	56	145	11444	3.5	398	41	9	11446	406	2	11732	416
		UTAH	1	4	14023	3.3	463	1	9	13118	477	2	12917	473
	772579	MICHIGAN	1	1	13910	3.6	504	1	9	14230	524			
		WISCONSIN	52	143	10714	3.4	363	31	8	11143	402	2	11602	410
		WEST VIRGINIA	1	4	6565	3.5	233							
	775264	NEW JERSEY	1	1	16260	3.6	579	1	1	12650	486			
		PENNSYLVANIA	1	1	13580	4.1	550							
		ILLINOIS	6	16	12754	3.7	473	3	20	13069	478	1	12455	472
		MICHIGAN	1	1	13410	3.4	456	1	11	12890	506			
		WISCONSIN	155	402	12006	3.5	418	123	10	12187	439	2	12182	440
		MINNESOTA	2	2	8405	4.0	336							
		VIRGINIA	1	3	8527	4.0	345							
	777728	PENNSYLVANIA	1	2	10525	3.5	370							
		WISCONSIN	40	107	11215	3.6	398	18	5	10964	388	2	10591	379
	779629	PENNSYLVANIA	1	3	9977	3.8	379	1	4	9820	361			
		MICHIGAN	6	6	13162	3.6	472	5	14	12886	477	1	13745	487
		WISCONSIN	43	81	11823	3.7	430	38	10	11837	431	2	12091	439
	780674	MICHIGAN	2	4	12958	4.0	520	2	9	13535	488	2	13849	514
		WISCONSIN	106	270	12365	3.5	431	85	9	11872	423	2	11669	417
		KENTUCKY	1	3	12637	3.6	454	1	3	13557	475	3	11267	402
	790977	INDIANA	1	2	10040	3.3	332	1	2	8765	305	1	7913	277
		WISCONSIN	22	51	11788	3.6	426	13	7	12184	434	2	12366	452
	805118	NEW YORK	1	1	12220	3.6	443							
		NEW JERSEY	1	2	8045	3.3	268							
		INDIANA	1	1	11260	3.5	394							
		ILLINOIS	1	2	12880	3.7	479					1	11129	415
		WISCONSIN	37	98	11133	3.5	388	26	10	11690	419	2	11331	408
	811487	ILLINOIS	1	1	10830	4.3	471							
		MICHIGAN	3	8	13045	3.8	497	3	6	12132	438	1	14475	566
		WISCONSIN	151	324	10561	3.8	402	136	10	11975	428	2	11743	423
		MARYLAND	1	1	9840	3.6	356							
	811875	WISCONSIN	3	13	11938	3.2	377	3	10	12086	410	2	12179	417
	822785	PENNSYLVANIA	1	1	10030	3.2	321	1	14	11960	412			
		WISCONSIN	70	164	11156	3.5	383	35	8	11777	421	2	11834	423
		TEXAS	1	1	7100	3.6	256							
	824617	WISCONSIN	20	68	11079	3.6	394	14	9	11457	411	1	11733	420
		MINNESOTA	1	4	12465	3.2	392	1	7	10638	507	1	9712	388
	832151	MICHIGAN	1	2	12060	3.7	438	1	10	10795	390	1	11401	412
		WISCONSIN	35	113	11167	3.5	387	21	8	12009	425	2	11832	422
	837641	NEW JERSEY	1	1	13170	3.7	488	1	23	13700	507	1	14900	540
		PENNSYLVANIA	1	1	10530	3.4	362	1	12	7690	286	1	8502	350
		ILLINOIS	1	1	14810	3.3	485	1	13	13260	527	1	13930	520
		MICHIGAN	15	26	14758	3.8	551	14	11	12502	463	1	12361	463
		WISCONSIN	146	233	12795	3.5	442	130	11	12401	445	1	12273	438
		IOWA	6	12	14284	3.6	514	5	6	12454	447	3	10800	464
		MARYLAND	1	2	7545	3.9	294	1	12	8245	305	2	9445	341
		ALABAMA	1	2	9005	3.4	302							
	842652	NEW YORK	1	2	12000	3.7	438							
		PENNSYLVANIA	1	1	6900	3.4	237	1	9	11060	402	1	10388	366
		MICHIGAN	1	1	13500	3.6	487	1	13	15140	573			
		WISCONSIN	143	366	10950	3.7	403	121	10	11652	418	2	11468	415
	843481	WISCONSIN	9	34	10842	3.4	373	4	7	11014	392	2	10359	380
	857482	PENNSYLVANIA	1	1	8080	3.6	290	1	21	9090	343			
		ILLINOIS	2	7	11014	4.1	439	2	12	13644	514	2	13747	513
		MICHIGAN	9	18	12009	3.8	452	8	8	11589	425	1	12781	479
		WISCONSIN	211	420	11439	3.8	434	198	10	11981	431	2	12070	436

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE WEST VIRGINIA	DAUGHTERS NO. 1	RECORDS NO. 2	MILK LB. 12090	TEST PCT. 4.1	FAT LB. 499	305-DAY CONTEMPORARY		AV. FAT LB.	YEARLY HERD		AV. FAT LB.
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.
865322	INDIANA		1	2	11980	4.0	476	1	6	9975	359	1	10671
	ILLINOIS		1	1	11270	3.4	385	1	15	13020	479	1	13996
	MICHIGAN		4	7	12955	3.8	479	3	8	12570	449	1	14159
	WISCONSIN		73	172	11707	3.5	408	66	10	11537	413	2	11804
	TENNESSEE		1	1	8290	3.7	304						
872234	MISSISSIPPI		1	1	9350	3.4	322	1	2	8420	357		
	NEW JERSEY		1	1	15860	3.1	490	1	27	12990	493	1	13331
	WISCONSIN		39	114	12284	3.3	408	30	8	11211	410	2	11549
	VIRGINIA		1	2	8685	3.7	320						
873311	MICHIGAN		4	4	10330	3.6	366	3	9	12197	447	1	12323
	WISCONSIN		57	89	12443	3.5	436	51	11	12265	442	1	12038
874103	MICHIGAN		2	4	15699	3.6	555	1	11	14167	537	2	13849
	WISCONSIN		35	73	11558	3.5	407	33	10	11311	404	2	11310
882931	NEW JERSEY		4	5	14078	3.4	483	3	8	12638	459	1	13098
	PENNSYLVANIA		1	2	11045	3.9	430	1	12	11390	423	2	10410
	INDIANA		1	1	16860	3.8	634	1	9	16810	617	1	16993
	ILLINOIS		1	3	12683	3.5	439	1	22	14353	544	2	14159
	MICHIGAN		9	16	13033	3.5	452	9	9	11770	429	1	12808
	WISCONSIN		119	166	13501	3.4	463	111	12	12520	448	1	12566
	MARYLAND		1	1	7170	4.4	317	1	9	4040	187	1	8012
	VIRGINIA		1	1	16220	4.0	643	1	42	13320	468		
882939	PENNSYLVANIA		1	1	9920	3.6	358	1	4	10180	393		
	ILLINOIS		1	3	14917	3.5	520	1	14	14660	547	1	14148
	MICHIGAN		8	21	12354	3.7	456	7	10	13044	471	1	12496
	WISCONSIN		183	420	12045	3.7	442	174	10	11647	413	2	11691
	MARYLAND		1	4	12088	3.9	471	1	11	10885	379	4	10652
885830	CONNECTICUT		1	2	10610	3.7	392	1	29	12055	443	2	12601
	NEW JERSEY		3	4	10112	3.6	367	3	28	11182	407	1	12065
	MICHIGAN		19	34	12962	3.6	470	19	12	12159	439	1	13052
	WISCONSIN		213	285	12965	3.6	463	203	13	12978	465	1	12895
	MINNESOTA		1	1	11710	3.6	421	1	34	10760	398	1	11020
	MARYLAND		1	1	8530	3.5	295					1	11074
	VIRGINIA		1	1	15560	3.4	534	1	14	14120	769	1	13647
	ALABAMA		1	1	10130	3.4	343					1	12317
	LOUISIANA		1	1	11310	3.6	411	1	32	14320	518	1	10595
888593	NEW YORK		1	5	14124	3.8	528	1	2	9503	473	3	9349
	NEW JERSEY		1	5	14910	3.6	540						
	PENNSYLVANIA		1	1	8650	3.0	263	1	30	8670	303		
	WISCONSIN		91	234	12281	3.5	430	78	9	11739	420	2	11573
	MARYLAND		1	1	5380	3.2	173	1	2	9830	345		
	WEST VIRGINIA		1	2	5005	3.5	174						
	TENNESSEE		1	1	5440	3.8	205						
892129	WISCONSIN		19	52	10862	3.7	397	10	10	10392	372	1	9768
892939	WISCONSIN		40	111	10600	3.5	370	23	9	11226	400	2	11240
	MARYLAND		1	3	11203	3.4	379	1	3	10047	376	3	9963
893388	PENNSYLVANIA		1	1	20500	3.4	693						
	MICHIGAN		1	2	14045	3.8	530	1	14	13975	527	2	13625
	WISCONSIN		84	201	11850	3.4	399	72	10	11641	415	2	11656
	NORTH CAROLINA		1	6	11882	3.4	396	1	8	10172	380	5	10573
902551	NEW JERSEY		1	2	12310	3.7	454						
	PENNSYLVANIA		1	2	8935	3.7	333	1	6	10900	414	1	10900
	ILLINOIS		1	3	10630	3.6	383						
	WISCONSIN		78	220	11433	3.7	417	64	10	11363	411	2	11510
	WEST VIRGINIA		1	2	9530	3.6	341						
903212	CONNECTICUT		1	1	16060	3.5	567	1	28	10640	400		
	ILLINOIS		1	2	12615	3.5	443	1	9	12170	449		
	MICHIGAN		5	9	12315	3.6	440	4	9	12666	456	1	12506
	WISCONSIN		109	201	12157	3.5	429	106	10	11981	430	2	12095
	VIRGINIA		1	1	9970	3.3	330	1	42	13470	475		
903631	WISCONSIN		6	9	11973	3.7	439	5	11	12754	457	1	13843
	KENTUCKY		1	1	15000	3.6	474					1	9854
910290	MICHIGAN		8	14	12185	3.6	434	8	12	12733	460	1	12128
	WISCONSIN		102	175	12660	3.6	452	90	12	12510	449	1	12319
	MINNESOTA		1	2	15150	3.2	474	1	6	11045	423		
	DELAWARE		3	6	10556	4.1	428	2	9	10997	416	2	9683
	NORTH CAROLINA		1	1	7010	3.6	254	1	11	5880	231	1	7096
914050	CONNECTICUT		1	2	13720	3.8	512	1	14	13170	474	2	13342
	NEW JERSEY		1	1	15890	3.8	599						

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		INDIANA	1	2	13555	3.4	464	1	2	11985	439	1	13385	507
		MICHIGAN	5	10	11203	3.9	423	5	9	14028	524	2	13091	482
		WISCONSIN	181	338	12076	3.6	431	168	11	11933	429	2	12007	433
		TENNESSEE	1	2	10820	4.1	437							
		OKLAHOMA	1	3	14603	3.5	504	1	11	11710	411	2	9745	353
918396	IDWA		1	1	12970	4.2	539	1	42	13310	514			
920632	MICHIGAN		11	20	11030	3.6	394	11	11	10435	396	1	10823	402
	WISCONSIN		148	227	11785	3.5	411	130	12	12449	449	1	12204	441
924097	PENNSYLVANIA		2	2	10325	3.7	380	1	14	11330	415	1	12960	475
	OHIO		1	1	19270	3.5	666	1	9	13500	466			
	MICHIGAN		11	22	12466	3.5	427	10	8	11945	432	1	12690	458
	WISCONSIN		227	401	12620	3.6	450	213	10	12188	437	2	12266	442
	KANSAS		1	2	14700	3.6	518							
	MARYLAND		1	1	10350	4.0	409	1	13	12600	483	1	12840	497
	KENTUCKY		1	1	11290	3.5	400	1	19	10950	374	1	11151	358
	LOUISIANA		1	1	13020	3.4	438	1	2	10070	383	1	10573	382
	WASHINGTON		1	2	11300	3.7	423	1	775	10520	441			
924105	NEW JERSEY		1	1	12060	3.2	384	1	7	10440	374	1	10431	384
	MICHIGAN		2	3	14763	3.7	540	2	8	9993	406	1	11391	452
	WISCONSIN		80	113	12874	3.5	454	72	13	12480	448	1	12484	451
926593	WISCONSIN		1	1	12850	3.6	464	1	13	13380	499	1	10704	414
927472	NEW JERSEY		1	2	9620	4.0	383							
	WISCONSIN		15	38	10988	3.6	399	11	10	11973	421	1	11534	410
	VIRGINIA		1	2	9225	4.3	401							
933212	OHIO		2	2	8945	3.8	331	2	9	10585	384	1	9875	388
	MICHIGAN		14	19	11227	3.7	412	14	14	11972	441	1	13339	482
	WISCONSIN		164	233	12356	3.7	456	155	13	12791	463	1	12843	467
	MINNESOTA		1	1	9920	3.4	336	1	23	10910	401	1	12197	440
	VIRGINIA		2	3	12338	3.6	442	1	36	13860	596	1	16459	594
937171	MICHIGAN		1	1	13950	4.0	559	1	11	12840	497			
	WISCONSIN		35	57	12859	3.4	439	34	11	11728	423	2	11598	418
	MARYLAND		1	3	10257	3.3	337	1	22	10380	374	1	10595	399
938770	NEW JERSEY		1	2	8735	4.0	347							
	PENNSYLVANIA		3	5	15877	3.4	538	3	8	11055	412	2	12233	457
	MICHIGAN		11	15	12785	3.8	481	11	13	12306	450	1	12907	474
	WISCONSIN		197	294	12958	3.5	456	189	14	12470	448	1	12350	446
	VIRGINIA		3	3	10697	3.4	365	2	28	14065	631	1	16459	594
	MISSISSIPPI		1	1	6930	3.6	246	1	27	7720	294	1	7750	308
943799	MASSACHUSETTS		1	3	14000	4.2	592	1	16	10890	443	3	11143	463
	NEW JERSEY		2	2	10345	4.0	413	2	21	12165	446	1	10573	390
	PENNSYLVANIA		3	4	9087	3.7	335	2	13	9220	340	1	11510	417
	MICHIGAN		28	39	11308	3.8	425	27	10	11816	438	1	12085	443
	WISCONSIN		561	895	11804	3.7	439	540	12	12613	452	1	12416	448
	MINNESOTA		1	3	11710	3.6	426	1	22	11850	435	3	12131	438
	IOWA		1	2	13280	3.7	492	1	3	14450	595	1	13854	486
	NEBRASKA		5	10	13880	4.0	557	5	32	14122	530	2	13791	526
	VIRGINIA		2	2	9240	3.7	347	1	23	10620	387	1	10333	375
	WEST VIRGINIA		1	1	7290	3.6	262	1	20	8470	309	1	9025	336
	TEXAS		1	3	8853	4.4	390	1	10	10930	390			
	WASHINGTON		1	2	12220	4.1	495	1	775	10520	441			
945462	WISCONSIN		48	115	9962	3.6	357	47	14	12488	447	2	12514	450
	MINNESOTA		1	1	8320	3.3	277	1	5	14060	500	1	14791	536
949094	NEW HAMPSHIRE		1	2	10125	3.6	364	1	2	13610	491	2	11374	416
	MASSACHUSETTS		5	9	10806	3.7	394	5	19	12489	455	2	12514	458
	CONNECTICUT		1	4	16690	3.5	585	1	30	14193	511	4	14328	530
	NEW YORK		31	66	15340	3.6	558	9	15	15386	584	1	14815	558
	NEW JERSEY		1	4	9843	3.8	369							
	PENNSYLVANIA		29	81	11926	3.7	439	28	11	12206	461	2	12542	480
	OHIO		2	6	11408	3.9	453	1	6	12728	455	2	11914	420
	MARYLAND		1	1	10620	3.2	344							
968786	NEW JERSEY		1	1	13850	3.5	485	1	23	13670	508	1	14900	540
	ILLINOIS		1	2	14400	3.2	465	1	4	13785	490	2	14459	518
	MICHIGAN		11	18	13262	3.8	502	11	13	12092	456	1	12250	458
	WISCONSIN		180	238	12181	3.6	436	171	13	12698	456	1	12542	454
	IOWA		1	2	17350	3.8	661	1	111	13780	507			
	TEXAS		1	1	10760	3.4	370	1	4	9480	369			
979368	WISCONSIN		16	18	12502	3.7	464	13	10	13566	493	1	12248	457
980008	NEW JERSEY		3	4	13807	3.6	501	3	17	13113	482	1	12266	456
	PENNSYLVANIA		4	5	8648	3.4	289	4	14	10290	386	1	11627	450
	MICHIGAN		8	12	11949	3.5	416	8	11	11355	425	1	11821	444

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREE	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD		
								NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		WISCONSIN	147	213	14113	3.5	493	137	14	12691	461	1	12809	464
		ALABAMA	1	1	13680	3.1	421							
	995940	WISCONSIN	21	44	11501	3.6	413	17	8	11885	415	2	11044	395
	1001768	PENNSYLVANIA	3	4	10172	3.9	402	3	15	13097	510	1	13478	507
		MICHIGAN	11	11	12418	3.6	448	11	14	12241	458	1	13333	485
		WISCONSIN	88	92	12238	3.6	439	83	13	12730	457	1	13277	477
		MINNESOTA	1	1	10150	3.4	342	1	23	10900	400	1	12197	440
		SOUTH CAROLINA	1	1	8750	3.5	305							
	1004144	NEW JERSEY	1	2	10395	3.6	372	1	12	12820	455	2	11304	411
		PENNSYLVANIA	2	4	10009	3.3	323	2	13	10624	401	3	12132	446
		MICHIGAN	9	19	12031	3.6	431	9	12	11415	420	2	11914	435
		WISCONSIN	251	387	12442	3.5	434	242	13	12557	454	1	12522	455
		MINNESOTA	1	1	12820	3.3	418	1	15	13480	470	1	12208	426
		IOWA	1	3	10830	3.6	389	1	22	10803	395	3	11285	409
		VIRGINIA	4	4	16550	3.6	588	3	20	16237	651	1	14438	557
	1013418	MICHIGAN	16	16	11717	3.6	426	16	15	11926	438	1	12728	464
		WISCONSIN	154	184	13157	3.5	460	152	15	12866	464	1	12625	458
		KENTUCKY	1	1	8840	3.4	297	1	2	10960	375	1	9636	338
	1013718	CONNECTICUT	1	1	9020	3.4	335	1	28	10860	409			
		NEW JERSEY	2	2	11045	3.7	408	2	12	11190	395	1	12034	435
		MICHIGAN	11	11	12851	3.5	443	11	10	11283	414	1	11925	430
		WISCONSIN	22	23	11909	3.5	420	19	14	12856	464	1	12951	468
		IOWA	3	3	15357	3.9	604	3	41	13737	518	1	11674	452
		ALABAMA	1	1	9040	3.6	329	1	39	7510	265	1	7837	298
	1023004	NEW JERSEY	1	1	12170	3.4	411	1	26	13270	493	1	13331	494
		PENNSYLVANIA	1	2	10525	3.9	407	1	27	9485	394	1	10508	422
		MICHIGAN	4	5	13723	3.5	477	2	10	10885	453	1	9287	431
		WISCONSIN	106	239	10313	3.7	383	102	9	11425	414	2	11129	406
		MARYLAND	1	3	10770	3.3	359	1	28	12433	451	2	13756	488
	1025339	ILLINOIS	1	4	13983	3.4	473	1	7	13803	512	3	14421	544
		WISCONSIN	13	29	11801	3.8	447	13	8	10838	402	1	11785	434
	1032617	NEW JERSEY	2	2	14745	3.4	499	1	4	12670	438	1	12993	444
		MICHIGAN	5	7	13314	3.8	510	5	13	10742	414	1	11628	440
		WISCONSIN	104	120	13442	3.7	494	100	13	12930	465	1	12868	467
		IOWA	1	1	16920	2.9	498	1	5	11390	439	1	14780	555
		MARYLAND	1	1	11600	3.8	440	1	44	10190	374	1	13026	486
		ALABAMA	1	1	9590	3.6	342	1	37	12750	464	1	13385	497
	1033088	MICHIGAN	7	12	11496	3.7	423	5	11	11909	430	1	12602	448
		WISCONSIN	75	102	11670	3.7	438	69	12	12516	448	1	12485	453
		NEBRASKA	5	15	12325	3.9	472	2	33	13725	526	2	13543	521
		GEORGIA	1	1	8530	3.9	332	1	86	9840	361	1	10083	380
	1033260	MICHIGAN	9	14	13398	3.7	496	9	8	12563	456	1	14072	496
		WISCONSIN	127	162	13422	3.7	494	123	14	13244	478	1	13278	485
		NEBRASKA	1	1	9640	3.8	362	1	17	11730	438	1	12906	480
		VIRGINIA	1	1	11470	3.8	434	1	18	10680	388	1	10333	375
		WEST VIRGINIA	1	1	9500	3.5	336	1	6	12540	488	1	12295	447
	1038494	NEW JERSEY	1	1	12910	3.5	448							
		PENNSYLVANIA	1	1	12540	3.0	375	1	23	9040	330			
		INDIANA	1	2	16580	3.5	570	1	1	13650	486	2	12285	438
		MICHIGAN	9	16	11503	3.7	425	6	11	11200	403	1	12052	431
		WISCONSIN	183	346	11341	3.6	410	171	10	11981	431	2	11848	430
		VIRGINIA	1	2	17515	3.9	684	1	20	16655	642	2	15675	600
		OKLAHOMA	1	2	10390	3.6	370	1	14	11380	360	2	9740	339
		TEXAS	1	1	9600	4.1	390	1	16	13250	466	1	13643	516
	1038627	NEW JERSEY	2	2	14345	3.4	484	2	13	13225	477	1	13555	481
		PENNSYLVANIA	5	6	12373	3.6	451	5	16	11533	440	1	12917	490
		ILLINOIS	1	1	15680	3.4	536	1	35	15210	533	1	13462	516
		MICHIGAN	5	6	12698	3.8	486	4	11	11714	428	1	12094	439
		WISCONSIN	302	493	12384	3.6	442	292	12	12352	444	1	12306	442
		MARYLAND	1	2	8500	3.9	331	1	13	9175	373	2	8094	342
		VIRGINIA	3	3	11347	3.8	414	3	37	13627	560	1	16459	594
		TEXAS	1	3	14687	3.6	525	1	5	12393	454			
		WASHINGTON	1	1	10170	3.7	375	1	776	10520	441			
	1049584	ILLINOIS	1	1	14330	3.6	521	1	2	14930	625			
		WISCONSIN	44	99	11722	3.6	416	42	11	11748	419	2	11813	419
		MINNESOTA	1	1	11360	4.3	484	1	12	10050	366	1	9200	336
	1054310	MICHIGAN	1	1	16590	3.9	654	1	16	8020	443	1	9788	472
		WISCONSIN	7	7	9493	3.9	368	1	13	14720	516	1	14639	522
	1062363	PENNSYLVANIA	1	2	9815	4.2	413	1	18	10365	433	1	12186	512
		MICHIGAN	6	7	12094	3.4	411	6	16	10300	393	1	10418	401

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE WISCONSIN	DAUGHTERS NO. 89	RECORDS NO. 108	MILK LB. 13362	TEST PCT. 3.4	FAT LB. 454	305-DAY CONTEMPORARY AV.				YEARLY HERO			AV. FAT LB.
								NO. OAS.	RECORDS NO. 84	MILK LB. 13	FAT LB. 12653	RECORDS NO. 1	MILK LB. 12474	FAT LB. 451	
1087246		OHIO	1	1	9730	3.8	372	1	10	12020	442	1	12818	468	
		MICHIGAN	2	2	11395	3.8	427	2	24	13150	461	1	12939	464	
		WISCONSIN	19	19	12943	3.7	477	19	13	12984	464	1	13406	477	
1089423		NEW JERSEY	1	1	11870	3.7	442	1	15	10650	382	1	12034	435	
		MICHIGAN	3	4	13703	3.9	527	3	10	11707	450	1	12393	483	
		WISCONSIN	87	93	13428	3.6	479	87	14	12799	464	1	13137	479	
		KANSAS	1	1	19680	3.6	703	1	11	15980	575	1	17069	623	
		KENTUCKY	1	1	12580	3.5	437	1	7	8740	316	1	9636	338	
		ARKANSAS	1	1	12600	3.8	475	1	16	13280	475				
1090980		OHIO	1	1	12770	3.3	425	1	3	14010	512				
		ILLINOIS	1	1	17250	3.6	629	1	19	15030	542				
		MICHIGAN	4	9	11838	3.7	442	4	10	13231	473	1	14132	508	
		WISCONSIN	62	84	12588	3.7	456	59	15	12659	464	1	12665	459	
		LOUISIANA	1	1	12870	3.8	493	1	43	12180	439	1	13156	477	
1105001		WISCONSIN	24	32	12570	3.7	459	24	14	12780	462	1	12761	466	
1110594		PENNSYLVANIA	1	1	13270	3.5	470	1	24	12230	443	1	14682	529	
		MICHIGAN	7	9	14091	3.8	540	7	15	12281	452	1	12701	470	
		WISCONSIN	108	125	13355	3.7	497	105	14	12626	460	1	12684	462	
		MARYLAND	1	1	14880	3.6	532								
1115396		MICHIGAN	6	7	13569	3.6	482	6	8	13672	492	1	13810	486	
		WISCONSIN	46	52	14099	3.4	482	45	15	13043	467	1	13815	496	
		MINNESOTA	1	1	12090	3.6	433	1	23	10810	396	1	12197	440	
1119383		MICHIGAN	1	2	11590	4.0	458	1	7	11765	436	2	13745	492	
		WISCONSIN	13	13	12068	3.5	424	13	13	12702	463	1	13628	484	
1128314		NEW JERSEY	1	1	11130	3.4	374	1	7	10210	377	1	12034	435	
		MICHIGAN	2	2	8670	4.0	346	1	23	12730	475	1	12203	471	
		WISCONSIN	23	23	12570	3.7	459	22	14	12864	463	1	13102	470	
1138724		MICHIGAN	6	6	12305	3.6	440	6	16	12130	444	1	13482	488	
		WISCONSIN	35	36	13049	3.5	459	34	12	13186	472	1	13716	491	
1146607		WISCONSIN	1	1	14580	3.3	484	1	8	9360	335	1	10617	378	
1177441		MICHIGAN	3	8	12403	3.9	486	3	9	12493	453	2	13008	476	
		WISCONSIN	53	72	11877	3.8	445	51	14	12103	443	1	12278	446	
1178235		WASHINGTON	13	26	14574	3.8	543	12	29	14129	544	1	12963	558	
1179895		CONNECTICUT	3	3	11373	3.5	403	3	18	10990	409	1	12466	469	
		PENNSYLVANIA	1	1	10520	4.6	489	1	24	8640	367				
		MICHIGAN	4	7	13283	3.6	466	4	13	12865	467	1	13388	477	
		WISCONSIN	151	203	12379	3.5	436	140	12	12497	450	1	12302	448	
		NEBRASKA	4	10	13471	3.6	483	4	43	13620	521	3	13710	518	
		VIRGINIA	3	3	12407	3.5	470					1	15707	581	
		FLORIDA	1	1	7620	3.6	272								
1193360		MICHIGAN	3	6	10963	3.6	393	3	8	10960	384	2	11445	414	
		WISCONSIN	32	45	12949	3.5	452	32	13	12872	456	1	12833	462	
1202133		PENNSYLVANIA	1	1	9340	4.0	375	1	23	10220	384	1	7957	294	
		MICHIGAN	3	4	10717	3.6	392	3	15	12618	464	1	13625	505	
		WISCONSIN	22	26	12786	3.6	456	22	16	12707	457	1	12766	457	
1211183		MICHIGAN	2	3	17233	3.5	595	1	4	15300	554	1	18159	649	
		WISCONSIN	34	41	12266	3.8	459	33	15	13301	479	1	12931	469	
1230731		MICHIGAN	1	1	10020	4.2	420	1	11	11980	449	1	12851	496	
		WISCONSIN	12	14	13216	3.4	452	12	17	12934	467	1	12468	448	
		IOWA	2	2	14005	3.7	504	2	36	13445	526	1	11532	448	
1230734		NEW JERSEY	1	2	16160	3.8	607	1	43	14210	527	1	13113	480	
		MICHIGAN	1	2	13765	3.5	485	1	12	12975	498	1	13625	505	
		WISCONSIN	37	40	13423	3.5	460	37	14	12991	466	1	12629	454	
		LOUISIANA	1	2	15210	3.5	550	1	38	13160	476	2	11876	414	
1230743		MICHIGAN	1	2	13930	3.4	479	1	4	16825	610	1	18159	649	
		WISCONSIN	6	7	11522	3.6	413	6	17	12797	471	1	12372	454	
1240212		MICHIGAN	1	1	25000	4.8	1000					1	9963	382	
		WISCONSIN	21	21	12581	3.5	436	19	15	12718	461	1	13541	490	
1269479		MICHIGAN	1	1	860	4.7	41	1	4	12510	486	1	13996	511	
JER.	478718	WISCONSIN	3	7	6329	4.9	309	3	8	7518	387	2	7168	374	

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD		
								NO. OAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
B. S.	486157	OHIO	2	3	7655	5.2	396	1	24	7245	351	2	6682	325
		WISCONSIN	11	16	6868	5.5	370	10	12	7289	382	2	7288	380
	500001	WISCONSIN	5	6	6749	5.2	346	4	18	6718	349	1	7591	398
	507867	INDIANA	2	4	5500	5.4	299	2	13	8135	432	2	9644	512
		MICHIGAN	3	4	7382	5.5	409	3	18	7837	401			
		WISCONSIN	6	11	6781	5.8	390	6	7	6858	363	2	6826	368
		IOWA	1	3	7073	5.9	422	1	57	9260	457	3	6344	454
		KENTUCKY	2	2	9400	5.4	511	2	24	9360	476	1	9374	471
		IOAHO	1	1	4390	6.1	266	1	18	7080	393	1	7859	427
	521598	ILLINOIS	1	1	8140	5.0	409	1	19	9030	466	1	7270	384
		WISCONSIN	15	16	8060	5.3	426	10	16	7877	420	1	8002	438
	540179	WISCONSIN	1	2	7310	4.9	354	1	9	7370	385	2	7134	376
	542648	MICHIGAN	1	1	4000	5.9	238	1	1	15100	573			
		WISCONSIN	1	1	7310	6.0	441	1	8	7990	439	1	8273	469
	546917	WISCONSIN	8	13	7673	5.3	403	8	11	7228	378	2	7158	381
	547753	WISCONSIN	10	10	6845	5.1	348	8	9	7759	395	1	8254	444
	548280	MICHIGAN	1	1	8880	5.2	459	1	6	7870	380	1	9832	450
		WISCONSIN	17	24	7735	5.1	390	16	14	7203	387	1	8033	428
	552060	MICHIGAN	1	1	8360	5.5	464	1	12	8480	407	1	9832	450
		WISCONSIN	16	22	7244	5.5	397	15	9	7284	390	1	8154	442
	59455	INDIANA	1	2	7690	4.3	328							
		MICHIGAN	1	2	9510	3.8	362							
		WISCONSIN	13	22	11438	4.3	488	13	12	11398	459	1	11212	453
	69653	NEW JERSEY	1	1	7860	3.9	310							
		MICHIGAN	1	3	14490	3.8	550							
		WISCONSIN	3	7	11774	4.2	485	3	9	9976	410	1	9325	384
	101470	WISCONSIN	10	10	12686	3.7	477	9	13	11583	469	1	11307	457
	103297	NEW JERSEY	1	3	8810	4.6	408	1	46	10720	419	1	10431	435
		MICHIGAN	2	4	9449	4.2	400							
		WISCONSIN	24	28	10301	4.3	441	19	9	11037	439	1	11273	455
	109586	MICHIGAN	1	3	9880	3.7	364							
		WISCONSIN	13	14	11601	4.0	463	12	13	11588	467	1	12566	517
	113925	WISCONSIN	4	6	11245	4.0	442	4	7	9600	387	1	9887	400
		MINNESOTA	1	1	7390	3.7	270	1	5	8370	324			
		NORTH DAKOTA	3	7	13131	3.9	518	2	28	11423	474			
003 GUER	233908	WISCONSIN	6	19	6786	5.2	348	1	9	11847	425	2	11162	398
	234813	WISCONSIN	6	16	6571	5.0	325	1	4	10768	408	2	10001	379
	237865	WISCONSIN	2	2	9950	4.5	451							
	246645	WISCONSIN	4	12	7550	4.9	368	2	8	8719	394			
	282310	WISCONSIN	14	37	7636	4.6	351	3	8	7862	384	1	7907	376
		ARIZONA	1	4	9093	4.5	405							
	304086	ILLINOIS	1	4	9103	4.4	397	1	5	10218	454	1	7837	350
		WISCONSIN	15	26	8050	4.6	365	12	8	8448	343	1	8416	354
	357326	WISCONSIN	8	22	8052	5.0	404	6	7	8492	365	1	8099	361
	368573	WISCONSIN	11	16	7499	4.6	342	11	9	8342	376	1	8200	354
		NEW MEXICO	1	1	8580	4.4	379							
	386910	WISCONSIN	14	25	7846	4.7	371	13	7	8293	361	1	7884	346
	388479	WISCONSIN	4	5	8415	4.4	364	4	14	8296	379	1	8148	372
	396784	WISCONSIN	1	1	7270	5.4	395							
	421269	WISCONSIN	10	15	8307	4.6	383	1	13	10080	481	1	10017	475
	423028	WISCONSIN	6	11	9557	5.0	464	6	14	9457	442	2	8532	414
	423505	WISCONSIN	3	4	6493	5.5	356	2	7	6438	321	2	8691	432
	433924	WISCONSIN	2	3	8335	5.2	433	2	15	9215	419	2	8982	436

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
	437432	WISCONSIN	1	2	8115	5.1	416	1	7	7940	385	2	8339	409
	448584	WISCONSIN	3	3	7790	5.0	383	3	16	8653	413	1	8459	421
	518677	WISCONSIN	1	1	11160	4.8	537	1	14	9130	454			
HOL.	673465	WISCONSIN	8	29	11152	3.5	385							
	676723	NEW YORK	1	1	12830	3.3	424							
		PENNSYLVANIA	1	3	9543	3.8	356	1	4	6820	309			
		ILLINOIS	2	3	10723	4.2	442							
		WISCONSIN	46	150	11956	3.7	439	11	11	13078	480	2	12855	476
	708526	PENNSYLVANIA	1	5	12414	3.6	448	1	8	11740	410	2	10279	385
		ILLINOIS	2	4	10240	3.3	333							
		WISCONSIN	38	111	11339	3.4	380	9	9	11869	412	1	11279	390
		MINNESOTA	1	3	10580	3.7	394							
	711087	WISCONSIN	12	27	12843	3.3	420	2	14	13844	500	2	13783	494
		NEW MEXICO	1	1	14840	3.5	514							
	725059	WISCONSIN	3	12	12224	3.2	386							
	727723	WISCONSIN	1	1	9450	3.6	342							
	729030	PENNSYLVANIA	1	7	14687	3.2	478	1	9	14027	466			
		MICHIGAN	1	1	11160	3.3	371							
		WISCONSIN	40	140	11318	3.6	406	9	8	11365	412	3	12195	433
		NORTH CAROLINA	1	1	10640	3.5	372							
	745535	WISCONSIN	6	15	11496	3.5	398	1	9	9685	362			
	748285	WISCONSIN	13	44	10412	3.5	365	5	7	10920	391	2	10963	390
	749064	PENNSYLVANIA	1	4	12875	3.8	480	1	12	12390	444	1	11718	416
		WISCONSIN	47	145	11077	3.4	379	23	7	12422	432	2	12096	422
		GEORGIA	1	1	15230	3.6	555	1	30	15330	583	1	14628	532
	749872	RHODE ISLAND	1	1	3950	3.2	128							
		INDIANA	1	5	11168	4.1	465							
		ILLINOIS	2	4	11475	4.0	461							
		WISCONSIN	76	244	10488	3.5	369	17	8	12467	433	2	11868	414
		TEXAS	1	1	4690	3.0	142							
	751310	OHIO	1	3	11257	3.6	408							
		WISCONSIN	12	33	10362	3.7	383	1	5	12064	414	3	12183	410
	752310	WISCONSIN	2	12	11208	3.3	370	2	5	10041	347			
	756406	WISCONSIN	1	3	12167	3.2	396							
	758853	PENNSYLVANIA	3	18	12414	3.5	432	2	8	12599	450	2	11156	431
		OHIO	1	3	12407	4.0	493							
		WISCONSIN	70	212	10614	3.6	383	16	10	12158	428	1	12176	430
		VIRGINIA	1	2	10875	3.8	411							
		NORTH CAROLINA	1	1	7670	3.3	254							
	770603	WISCONSIN	4	6	8434	3.3	277							
		MARYLAND	1	4	14093	3.2	446							
	771491	PENNSYLVANIA	1	5	10710	3.5	372	1	3	10583	422	2	7554	285
		INDIANA	1	1	10500	3.6	383							
		ILLINOIS	1	6	13885	4.0	548	1	8	11210	405	1	10333	373
		WISCONSIN	158	361	11520	3.6	408	89	11	12442	434	2	12012	422
		MINNESOTA	1	2	9270	3.7	343	1	17	12225	445	2	12028	445
		IOWA	1	5	12064	4.0	480	1	7	11620	396	3	11841	410
		NEBRASKA	1	2	11365	3.8	427							
		MARYLAND	4	7	9423	3.8	361	1	18	10315	380	1	10595	399
		VIRGINIA	2	5	15628	3.3	509							
		KENTUCKY	1	3	10043	3.4	341	1	1	12587	447			
	778470	NEW YORK	1	1	12660	3.5	443							
		PENNSYLVANIA	2	7	12298	3.3	408	1	21	11155	418	2	9631	418
		ILLINOIS	3	10	11986	3.5	424	2	7	14232	501	3	12604	459
		WISCONSIN	39	98	10516	3.5	360	22	10	11655	409	2	11641	410
		MARYLAND	1	5	8260	3.5	287	1	15	9368	338	3	9105	330
		VIRGINIA	1	2	8250	3.5	289							
		KENTUCKY	1	2	12760	3.7	463							
	784721	NEW YORK	1	1	10490	3.5	363							
		ILLINOIS	2	6	14553	3.3	471	2	3	13032	470	1	11571	432
		WISCONSIN	75	222	12804	3.4	438	52	14	12626	446	2	12633	450
		IOWA	1	2	12665	3.4	421	1	3	11230	427	1	10628	372
		MARYLAND	1	2	11335	3.1	347							
		VIRGINIA	1	4	13255	3.4	446							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
								ND.	RECORDS	MILK	FAT	RECORDS	MILK	FAT
								DAUS.	NO.	LB.	LB.	NO.	LB.	LB.
		WEST VIRGINIA	1	3	8053	3.8	307							
		KENTUCKY	1	2	13220	3.5	453	1	11	11745	421	2	10164	363
790365		WISCONSIN	28	89	11515	3.5	405	12	6	12002	425	2	11143	390
798700		WISCONSIN	2	2	9280	3.9	364							
805972		WISCONSIN	3	9	12550	3.4	434	1	1	11623	355	1	13211	433
		MARYLAND	1	5	11438	3.9	451	1	17	12898	443	2	12535	434
813025		PENNSYLVANIA	1	2	10715	3.7	388							
		ILLINOIS	1	5	14596	3.7	538	1	3	15100	537	1	14879	549
		WISCONSIN	38	85	11060	3.2	352	11	8	12312	430	2	11722	402
		MISSOURI	1	1	10070	2.9	290							
		WASHINGTON	1	1	12550	3.3	410	1	17	13480	481			
863763		PENNSYLVANIA	3	3	12007	3.5	416	1	9	9940	362			
		INDIANA	1	1	9230	4.4	403							
		WISCONSIN	83	213	12605	3.6	456	75	13	12270	437	2	12079	427
		IOWA	1	7	15691	3.5	561	1	13	11717	456	4	12118	464
		VIRGINIA	1	1	8870	3.9	346							
877660		CONNECTICUT	1	4	13258	3.6	485	1	23	15545	556	1	14889	538
		NEW YORK	1	1	11150	3.3	364							
		PENNSYLVANIA	11	27	12960	3.6	464	7	12	12108	438	3	12025	455
		INDIANA	4	11	13460	3.5	464	1	2	12176	412	2	11369	383
		ILLINOIS	8	13	12864	3.5	442	6	6	13004	482	2	13203	484
		WISCONSIN	477	1113	12231	3.5	421	393	11	12347	439	2	12201	433
		MINNESOTA	1	2	10950	3.6	390	1	7	13025	482			
		IOWA	3	8	13101	3.7	484	3	11	12961	478	2	13585	511
		MARYLAND	3	10	8875	3.4	302	2	7	9782	362	2	8352	321
		VIRGINIA	6	12	12472	3.7	448							
		WEST VIRGINIA	1	1	10450	3.8	400							
		NORTH CAROLINA	2	6	12478	3.7	444	1	1	13760	455	2	9511	319
		TEXAS	3	5	11857	3.5	412	2	16	12789	439	2	8475	390
		NEW MEXICO	1	1	14350	3.5	499							
		UTAH	1	5	16186	3.6	584	1	6	12806	459	2	11402	431
884249		PENNSYLVANIA	1	1	14790	4.1	601	1	1	16290	653	1	13276	498
		MICHIGAN	1	3	12227	3.6	445	1	7	12070	436	2	12110	442
		WISCONSIN	115	239	11764	3.6	424	111	11	12431	447	2	11853	424
		NORTH DAKOTA	1	2	7545	3.4	257	1	14	8920	319	2	9293	324
		MARYLAND	1	3	11130	4.0	443	1	47	11333	422	2	13980	506
		VIRGINIA	1	1	12270	3.6	437	1	36	13880	595			
		WEST VIRGINIA	1	1	8260	3.8	312							
		TEXAS	2	7	14653	3.7	545	2	24	12011	458	3	9793	425
894060		NEW YORK	1	1	8890	3.9	342							
		WISCONSIN	24	59	11163	3.4	382	13	9	11677	411	2	11554	408
		GEORGIA	1	5	14958	3.6	537							
895914		NEW YORK	2	7	10084	3.5	347	1	14	12988	468			
		NEW JERSEY	1	1	9640	2.9	284							
		PENNSYLVANIA	7	15	11625	3.4	395	4	18	11183	404	3	11038	400
		INDIANA	1	1	12680	3.5	440	1	1	14950	547	1	11380	444
		ILLINOIS	5	15	12450	3.7	449	5	14	11889	451	2	12377	465
		MICHIGAN	1	1	13370	3.1	410					1	14235	517
		WISCONSIN	286	601	11684	3.4	392	267	12	12191	431	2	11997	421
		MINNESOTA	1	2	13125	3.1	407	1	13	16625	615	1	16110	570
		IOWA	3	7	10794	3.5	372	3	5	11563	424	2	7870	292
		NEBRASKA	1	1	10830	3.4	371	1	9	13020	477	1	10322	389
		MARYLAND	1	5	12518	3.5	429	1	25	12504	430	3	12880	458
		WEST VIRGINIA	1	1	5370	3.1	168	1	28	9800	356	1	9625	354
		NORTH CAROLINA	1	4	10445	2.9	304	1	6	8580	339	2	10263	376
		KENTUCKY	1	2	8585	3.2	279	1	3	11830	423	1	10115	350
		ALABAMA	1	1	13270	2.9	378							
		LOUISIANA	1	3	10917	3.7	407							
		TEXAS	3	6	11111	3.2	359	2	24	10684	438	2	8156	382
		WYOMING	1	2	10445	3.4	350	1	1	12045	458			
		WASHINGTON	1	1	12440	3.4	420							
925396		NEW YORK	1	5	13158	3.6	468							
		PENNSYLVANIA	1	2	10015	3.6	355	1	21	10825	442			
		INDIANA	1	4	11818	3.8	443	1	1	13810	538	1	11478	415
		ILLINOIS	4	8	12114	3.7	446	3	8	11667	435	2	11102	414
		WISCONSIN	190	359	11785	3.7	430	184	11	12253	434	2	12231	433
		MINNESOTA	1	2	9625	4.1	399	1	6	7950	274	2	8295	271
		IOWA	3	3	12597	3.7	475	3	39	13647	497	1	10486	375
		VIRGINIA	1	1	11970	4.1	485							
		WEST VIRGINIA	2	3	12115	4.0	484	1	50	12930	478	1	13669	516
		NORTH CAROLINA	1	1	12530	3.6	448	1	6	9540	332	1	10192	343
		ALABAMA	2	5	11089	3.1	341							
		LOUISIANA	1	4	8913	3.6	313	1	18	9333	328	3	9134	321
		TEXAS	1	2	8335	3.6	303							
		DRESDEN	1	1	12360	3.6	451	1	6	11650	423			

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY NO. NO.	AV. MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
933199		PENNSYLVANIA	2	2	10710	3.6	377	2	14	11455	396	1	12055	421
		INDIANA	1	4	10898	3.5	377	1	4	10525	356	3	8727	321
		ILLINOIS	1	3	13863	3.9	547	1	18	12020	461	1	12197	441
		WISCONSIN	141	222	11626	3.6	419	136	14	12542	451	1	12322	439
		IOWA	1	1	9050	3.4	306	1	30	10830	402	1	11794	446
		MISSOURI	1	2	7225	3.5	253	1	8	8675	332	2	8339	314
		WEST VIRGINIA	1	1	17800	3.5	617							
941809		PENNSYLVANIA	4	13	11834	3.8	445	2	11	10431	419	3	10598	433
		OHIO	1	2	10390	3.5	365	1	2	10990	359			
		INDIANA	1	5	14840	3.5	525	1	2	11758	387	2	12339	452
		ILLINOIS	2	6	12964	3.8	495	1	10	14058	525	5	13311	497
		MICHIGAN	1	1	13960	3.5	489							
		WISCONSIN	266	678	11456	3.5	396	176	10	11942	416	2	11770	413
		IOWA	1	2	8270	4.0	326	1	8	11530	410	1	10628	372
		MISSOURI	1	1	15670	3.5	548					1	11859	439
		MARYLAND	2	10	13229	3.5	464	1	14	13245	472	4	13669	506
		VIRGINIA	1	1	11520	3.8	437							
		WEST VIRGINIA	1	5	8744	3.5	309							
		KENTUCKY	1	5	8216	3.3	266	1	9	9924	356	2	9042	347
		TEXAS	1	3	11937	3.3	386	1	12	10983	386	2	11047	394
946132		PENNSYLVANIA	1	2	8095	3.3	262	1	14	10535	379	2	10769	383
		INDIANA	1	2	12345	4.3	532							
		WISCONSIN	101	217	11103	3.6	394	84	11	11860	416	2	11930	418
		IOWA	1	1	10080	3.6	367	1	4	11310	419			
		TEXAS	1	5	10424	4.3	442	1	9	10036	410	3	8575	360
984803		PENNSYLVANIA	5	5	12718	3.5	455	5	13	12196	443	1	11963	447
		OHIO	3	4	9920	3.7	383	3	4	10682	377	2	14137	514
		ILLINOIS	4	5	14670	3.7	537	4	10	12464	457	1	12377	444
		WISCONSIN	434	673	12770	3.8	478	407	12	12983	470	1	12724	462
		MINNESOTA	2	4	12935	4.0	502	2	11	13295	476	2	12263	400
		IOWA	3	4	11972	3.8	455	2	14	11715	427	1	10726	380
		MISSOURI	5	5	12026	4.0	479	3	4	13507	495	1	12971	480
		NEBRASKA	2	2	13170	3.6	477	2	7	11680	442	1	10077	388
		VIRGINIA	2	2	14815	3.7	546	2	27	12735	530	1	12514	446
		WEST VIRGINIA	4	7	14597	3.6	522	3	3	13302	461	2	12707	465
		FLORIDA	2	3	11793	3.5	405	2	11	9773	355			
		KENTUCKY	1	1	10410	4.0	422	1	7	13730	483			
		ALABAMA	4	7	9798	3.5	344	2	17	6228	250	1	7063	292
		TEXAS	1	2	13095	3.4	446	1	20	14180	488	2	10938	393
		IDAHO	2	3	8883	4.0	354	2	2	7810	299	1	9069	328
		UTAH	1	2	17815	3.4	601	1	5	15125	549			
999678		PENNSYLVANIA	3	3	11880	4.0	476	3	10	11880	466	1	13087	502
		INDIANA	1	2	10365	4.1	418	1	8	11945	431	1	12263	428
		WISCONSIN	218	280	12384	3.6	449	212	13	13225	481	1	13079	478
		WEST VIRGINIA	2	2	7965	3.9	309	2	26	10490	398	1	10988	416
		FLORIDA	2	2	7265	3.8	277	1	5	10160	361	1	8567	338
		ALABAMA	2	2	8255	3.7	305	2	6	9030	331	1	9330	342
		COLORADO	1	1	15570	3.5	546	1	12	12210	443	1	12252	453
		ARIZONA	1	2	11370	4.0	456	1	35	15025	508	1	13124	486
1001749		WISCONSIN	1	1	12780	3.3	419	1	9	14470	550	1	13145	440
1048546		PENNSYLVANIA	1	2	10920	3.6	394	1	53	8450	315	1	11423	416
		WISCONSIN	95	128	13229	3.5	466	93	12	13319	485	1	13032	470
		MARYLAND	1	2	12565	3.3	418	1	34	10430	381	2	12214	453
		WEST VIRGINIA	1	1	11580	3.7	432							
1052521		ILLINOIS	1	1	10430	5.0	524	1	13	14410	550	1	13974	531
		WISCONSIN	51	65	11971	3.6	433	49	12	12365	447	1	12558	453
		FLORIDA	1	1	7480	3.1	234	1	18	9520	355			
		TEXAS	1	1	11930	3.6	428	1	17	14520	499	1	9112	407
1055021		NEW YORK	2	6	13709	3.5	480	1	4	12530	464			
		PENNSYLVANIA	1	1	14850	3.9	573	1	22	10230	364	1	12143	435
		WISCONSIN	94	158	12892	3.6	464	90	13	12489	450	2	12224	437
		IOWA	1	2	14730	3.6	526	1	8	14215	523	1	10584	379
		MARYLAND	2	7	12802	3.4	430	2	30	12727	441	3	12821	444
		VIRGINIA	3	5	12693	3.6	455	1	9	15375	582	1	12121	450
		TEXAS	1	4	11645	3.6	422	1	3	12420	478			
1061147		ILLINOIS	1	1	12550	3.6	451	1	14	11410	417	1	10726	391
		MICHIGAN	1	1	16160	3.5	569	1	12	14580	496	1	13767	485
		WISCONSIN	87	99	13384	3.9	516	86	12	13013	471	1	13178	478
		IOWA	1	1	14390	3.7	536	1	24	13290	523	1	13919	534
		VIRGINIA	2	2	12715	3.6	447	2	24	11690	471	1	8993	324
1070036		CONNECTICUT	2	5	15752	3.7	582	2	23	13533	494	2	13691	500
		NEW JERSEY	1	4	11758	4.1	477							
		PENNSYLVANIA	12	20	13006	3.9	498	12	13	12200	452	1	12481	458
		OHIO	7	9	13210	3.8	501	7	5	11644	465	2	10410	365
		INDIANA	7	13	12305	3.7	455	7	10	11694	409	2	11828	414

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.		
									NO.	RECORDS	MILK LB.	FAT LB.	NO.	RECORDS	AV. FAT LB.
			ILLINOIS	7	13	12175	3.7	450	7	16	12675	473	1	12611	476
			MICHIGAN	3	5	14835	3.6	534	3	26	12555	459	1	13919	502
			WISCONSIN	1004	1545	13784	3.8	520	947	12	12765	457	1	12668	455
			MINNESOTA	2	2	14365	3.7	530	2	11	11135	384	1	15020	513
			IOWA	20	32	15328	3.8	585	20	15	12970	479	1	12651	482
			MISSOURI	5	15	13669	3.9	537	5	4	10500	399	2	10964	391
			NEBRASKA	5	7	11796	3.7	432	5	12	10829	385	1	9825	373
			KANSAS	1	1	11870	3.8	452	1	29	12850	472	1	12949	477
			MARYLAND	4	6	15026	3.6	546	4	33	12468	461	1	13585	488
			VIRGINIA	8	8	15544	3.8	595	8	27	12455	443	1	13963	494
			WEST VIRGINIA	13	14	13060	3.8	497	3	28	10623	375	1	10546	395
			NORTH CAROLINA	1	1	7930	3.5	265	1	4	5320	218	1	5287	215
			FLORIDA	6	7	11243	3.7	413	5	12	9626	357			
			KENTUCKY	1	1	7910	3.9	311	1	5	9530	349			
			ALABAMA	5	7	12253	3.5	432	4	15	10820	368	1	10617	361
			MISSISSIPPI	1	1	10750	3.4	367	1	4	9510	353	1	5352	240
			LOUISIANA	1	3	11590	3.4	392	1	20	9133	365	1	8349	356
			TEXAS	6	12	14633	3.5	511	4	23	12539	437	6	12951	481
			IDAHO	1	1	14050	3.4	474	1	1	7380	289	1	9069	328
			WYOMING	1	2	13750	3.7	509							
			UTAH	1	2	11175	3.0	332	1	8	10375	413	2	11402	431
1090978			PENNSYLVANIA	1	1	14530	3.5	502	1	9	11530	407			
			OHIO	1	2	12900	3.1	399	1	11	12250	448	1	11478	416
			WISCONSIN	110	144	12209	3.6	436	101	13	12885	466	1	12593	454
			MINNESOTA	1	1	11760	4.0	473	1	45	16440	573	1	16045	578
			IOWA	1	1	15090	4.3	650	1	28	13980	517	1	12241	449
			FLORIDA	1	2	8975	4.4	389	1	4	13060	462			
			TEXAS	1	1	14030	3.5	487							
1128315			OHIO	4	10	12173	3.7	449	4	8	13235	488	1	11122	406
			ILLINOIS	2	3	10960	3.8	417	2	11	11593	437	1	10006	359
			WISCONSIN	76	107	12454	3.8	471	75	15	12966	471	1	12667	454
			WEST VIRGINIA	2	2	12235	3.7	446							
			UTAH	1	1	15090	3.5	526	1	6	12710	457			
1178742			INDIANA	1	2	10505	3.6	379	1	3	13415	537	1	12426	446
			ILLINOIS	1	1	7500	3.6	267							
			WISCONSIN	71	94	11822	3.7	437	66	15	12504	452	1	12339	462
			IOWA	2	2	9490	3.8	359	2	29	10860	402	1	11794	446
			FLORIDA	1	1	11780	3.6	446	1	4	12370	450			
			COLORADO	1	1	13510	4.2	570	1	12	12390	441	1	12252	453
1189513			CONNECTICUT	2	2	8825	3.9	343	2	33	12710	467	1	13772	511
			PENNSYLVANIA	1	2	7645	4.1	321	1	7	12525	453	1	9690	365
			WISCONSIN	50	64	11994	3.6	433	49	13	12728	463	1	12493	461
			COLORADO	2	2	11600	3.6	412	1	12	12560	454	1	12252	453
1202434			WISCONSIN	7	8	14469	3.6	515	7	12	13179	478	1	14022	501
1213875			CONNECTICUT	1	2	11840	3.6	422	1	29	12005	442	2	12350	457
			PENNSYLVANIA	1	1	12480	3.9	488	1	20	11930	453			
			WISCONSIN	96	120	12385	3.6	449	94	14	13325	485	1	13009	472
			IOWA	1	1	13900	4.1	569	1	8	11080	413	1	12175	454
			SOUTH CAROLINA	1	1	12650	3.7	466	1	45	13560	486	1	14290	511
1217566			ILLINOIS	1	1	12140	3.6	440	1	19	15240	541			
			WISCONSIN	42	48	12726	3.6	456	42	14	13086	477	1	12864	462
			IOWA	1	1	10540	4.1	433							
			ARIZONA	1	2	12600	3.5	429	1	19	12275	434	2	11254	435
1222727			OHIO	2	2	14310	4.0	570	2	9	12250	466			
			WISCONSIN	93	105	13550	3.7	503	91	14	12950	476	1	13227	479
			WEST VIRGINIA	1	1	8710	4.2	366	1	27	11190	397			
1225853			WISCONSIN	1	1	21100	3.9	815							
1238318			WISCONSIN	2	2	11125	3.6	402					1	12470	448
1269042			WISCONSIN	8	8	12929	3.5	447	6	6	13305	479	1	13781	501
			UTAH	1	1	11250	3.8	432	1	10	13690	478			
1272753			ALABAMA	1	1	9250	3.8	348	1	3	8720	316			
1279641			OHIO	1	1	11550	3.7	422	1	7	12240	465			
			WISCONSIN	4	4	13265	3.6	470	4	2	12898	468	1	12593	468
JER.	557328		NEW YORK	2	4	8055	5.4	433	2	24	8910	482	2	9140	490
			MICHIGAN	1	1	10630	4.5	480	1	8	10270	547	1	9865	520
			WASHINGTON	1	1	8380	5.0	417	1	13	9230	475	1	9156	480
B. S.	35299		OHIO	2	10	10697	4.1	433							
			WISCONSIN	24	79	8747	4.0	350	4	7	10475	407	1	10441	409

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
004	41769	ILLINOIS	2	2	10055	3.6	364							
		WISCONSIN	18	51	10671	3.5	367	2	3	10196	366	1	8328	293
	44741	INDIANA	1	2	7975	3.9	312							
		ILLINOIS	3	3	6920	3.6	253							
		MICHIGAN	1	2	9145	4.0	366							
		WISCONSIN	3	3	9080	3.7	343							
		IOWA	1	4	8923	3.8	339							
	57594	ILLINOIS	1	6	13163	4.0	527	1	5	12604	515	4	13423	547
		WISCONSIN	36	77	8583	3.9	332	9	8	10085	376	1	9561	374
	70430	WISCONSIN	15	37	11921	4.0	477	9	9	11097	451	2	10656	432
	75281	OHIO	1	3	10070	3.9	398							
		ILLINOIS	1	3	9320	4.4	411	1	5	11290	487	3	8825	367
		WISCONSIN	13	28	8668	4.2	362	10	11	9715	388	2	9986	411
		KANSAS	1	1	7280	4.6	351							
		FLORIDA	1	1	6890	3.8	263							
	75913	OHIO	1	1	7680	4.2	326	1	16	10480	424	1	10333	407
		WISCONSIN	22	31	11117	4.0	445	21	11	11391	465	1	11826	467
	78928	PENNSYLVANIA	1	1	4970	4.6	231							
		WISCONSIN	18	26	10434	4.1	423	17	10	11081	439	1	11462	458
		NORTH DAKOTA	1	3	11780	3.8	450	1	27	10320	432			
	85139	WISCONSIN	12	21	9878	4.1	400	11	9	10478	407	2	10762	420
		TEXAS	1	1	8770	3.6	319							
	116177	ILLINOIS	1	4	14145	3.9	558	1	7	12168	502	3	12157	453
		WISCONSIN	10	15	12197	4.1	500	9	11	11551	461	1	11571	457
	116729	ILLINOIS	2	3	12995	4.2	535	2	13	11155	460	1	11903	519
		WISCONSIN	39	49	13017	4.0	524	34	15	11548	478	1	11188	458
		MINNESOTA	7	19	12145	4.0	482	6	10	11798	470	2	11386	449
		IOWA	1	1	9890	4.4	438	1	12	10220	423	1	10148	428
		NEBRASKA	1	2	9160	3.8	351							
		MONTANA	1	1	19390	4.1	793							
	121214	MICHIGAN	1	1	10480	4.2	443	1	9	12890	497	1	13701	531
		WISCONSIN	10	12	9923	4.2	419	10	10	10757	432	1	11102	433
	125021	WISCONSIN	2	2	10955	3.9	422	2	9	10660	433	1	9964	380
	357179	INDIANA	1	1	11210	5.0	564	1	2	8010	380	1	6409	308
		WISCONSIN	13	31	7522	4.9	365	8	10	8565	392	2	8662	398
	392029	WISCONSIN	1	1	9730	4.1	400	1	7	7190	353	1	7183	355
	405227	FLORIDA	1	1	6760	4.2	282	1	155	6660	300			
	405991	WISCONSIN	1	1	5130	5.0	259	1	4	6820	346	1	7183	355
	443311	WISCONSIN	3	3	6087	4.6	280	3	14	8660	354	1	8720	361
	857507	WISCONSIN	2	5	13103	3.8	490	2	11	13134	475	2	13214	476
		MISSOURI	1	1	18580	3.4	637	1	40	13600	473	1	11707	416
		VIRGINIA	1	1	10020	3.4	337							
		TEXAS	1	4	14643	3.6	549	1	5	10913	439	3	9211	370
	880000	ILLINOIS	2	2	12185	3.6	444	2	17	12375	449			
		WISCONSIN	33	73	12459	3.5	440	30	11	12194	428	2	11810	418
		NEBRASKA	1	3	11727	3.8	450	1	9	12060	438	3	12161	447
		VIRGINIA	1	2	7540	4.2	315							
		LOUISIANA	1	4	13270	3.6	472							
	903887	NEW YORK	2	7	12859	3.6	464							
		PENNSYLVANIA	2	2	10925	3.6	385	2	29	13740	533	1	14993	565
		OHIO	1	1	13370	3.5	464	1	19	12660	501	1	13745	536
		INDIANA	1	1	9850	3.3	322							
		ILLINOIS	8	23	12002	3.6	431	4	11	11240	413	1	11165	402
		MICHIGAN	4	12	12230	3.6	442	3	15	12871	461	2	13040	471
		WISCONSIN	121	293	11666	3.5	411	100	10	11999	429	2	11674	418
		IOWA	1	3	18030	3.4	627							
		MISSOURI	1	1	10820	3.7	399							
		KANSAS	1	2	9735	4.0	385							
	913356	PENNSYLVANIA	2	2	10915	3.6	412	2	16	10865	422	1	11118	423
		ILLINOIS	1	1	11990	3.1	374	1	10	11920	400	1	12546	456
		WISCONSIN	7	11	11983	3.5	421	7	15	12944	470	1	12767	465
		WASHINGTON	1	1	11710	3.4	396	1	9	12640	464			
	923129	WISCONSIN	25	33	12029	3.7	444	20	10	12508	459	1	12152	454
		ALABAMA	1	2	6165	3.4	206							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY NO. RECORDS	MILK LB.	FAT LB.	YEARLY RECDROS NO.	HERD MILK LB.	AV. FAT LB.
	925144	OHIO	1	4	16605	3.5	583	1	5	14650	488	2	14743	475
		ILLINOIS	1	1	13290	4.3	566							
		WISCONSIN	54	95	11877	3.6	427	50	14	12281	439	2	12100	434
		WEST VIRGINIA	1	2	15685	3.9	610							
		NORTH CAROLINA	1	1	10170	3.9	398	1	13	12090	473	1	12066	477
		IDAHO	1	5	14614	4.5	660	1	14	14054	568	5	13405	520
		UTAH	1	1	13400	4.0	531	1	21	16180	591			
	925394	PENNSYLVANIA	1	1	6860	3.9	267	1	19	12540	455	1	13233	491
		ILLINOIS	1	2	9370	3.3	303	1	12	11430	393	2	10268	358
		MICHIGAN	1	3	13117	3.4	442	1	7	10333	375	2	12110	442
		WISCONSIN	24	39	11328	3.8	423	22	12	12097	427	1	11966	430
		MISSOURI	1	3	17640	3.9	692	1	2	17233	617	3	15398	542
		NORTH DAKOTA	1	3	11327	3.8	431	1	9	12047	428	3	10562	371
		MARYLAND	1	2	14615	3.7	545	1	7	14440	557	2	14214	528
		KENTUCKY	1	2	12250	3.1	384	1	12	9770	334			
		IDAHO	1	2	11230	4.4	488	1	4	12875	484	2	13364	492
	932370	WISCONSIN	3	8	12493	3.4	427	2	5	11913	422	3	10481	370
	932377	ILLINOIS	3	6	12808	3.7	455	3	18	13757	502	2	12873	474
		MICHIGAN	2	2	11880	3.6	425	2	17	12950	462	1	12590	457
		WISCONSIN	15	22	12542	3.5	436	14	14	11719	422	1	11528	417
		FLORIDA	1	1	10060	3.3	328	1	63	9130	350	1	8077	331
		LOUISIANA	1	1	9840	3.5	542							
	949156	NEW JERSEY	1	1	10280	3.3	336	1	40	11350	420	1	12557	464
		OHIO	1	1	11480	3.7	427							
		INDIANA	1	1	12060	3.9	468	1	22	13690	488	1	13211	451
		ILLINOIS	3	3	10583	3.7	393	3	7	12087	437	1	12938	489
		MICHIGAN	4	12	10872	3.6	390	4	10	11905	435	1	12463	450
		WISCONSIN	91	140	11879	3.5	421	90	12	12460	451	1	12277	446
		IOWA	1	4	14608	3.8	549	1	15	13583	498	3	11703	464
		MARYLAND	1	1	12120	3.9	472	1	20	10220	460			
		VIRGINIA	1	1	16700	3.4	560	1	36	13760	592			
		FLORIDA	1	1	14750	3.5	515							
		MISSISSIPPI	1	3	12040	3.3	396	1	16	12163	435	2	10464	367
		COLORADO	1	2	10800	3.8	412							
	949223	ILLINOIS	2	2	11980	3.2	381	2	3	10955	389			
		WISCONSIN	30	36	13439	3.5	465	30	14	13735	481	1	12705	457
	949233	WISCONSIN	2	2	12205	3.4	407	2	21	11920	412	1	12116	442
	972712	NEW JERSEY	1	1	14490	3.6	517	1	8	14570	559	1	14170	536
		PENNSYLVANIA	1	1	17020	3.6	616	1	14	13690	492	1	12764	457
		OHIO	1	2	10155	3.8	388	1	7	11240	419	1	11292	420
		ILLINOIS	1	1	12400	3.3	408	1	2	10520	398	1	12546	456
		MICHIGAN	1	1	9600	3.6	350	1	7	10780	415	1	13211	522
		WISCONSIN	46	65	11906	3.5	413	42	14	11737	421	1	11842	426
		IOWA	1	1	8570	3.6	308	1	6	10750	385			
		WEST VIRGINIA	1	2	10100	3.7	373	1	14	11040	395	2	10922	394
		GEORGIA	1	1	7960	3.7	294	1	18	11790	435	1	15434	538
	996245	ILLINOIS	1	1	14680	3.8	560	1	4	16170	617	1	14257	524
		WISCONSIN	24	36	11519	3.7	425	14	13	12139	436	1	12468	450
	1003754	WISCONSIN	2	2	9225	3.9	355	2	11	9845	346			
	1007952	ILLINOIS	1	3	10753	3.5	373	1	6	10390	366	1	11347	408
		WISCONSIN	2	5	11336	3.6	409	2	14	12691	435	3	11410	392
	1020830	WISCONSIN	5	11	12734	3.7	464	5	12	11992	427	3	11117	396
		UTAH	1	3	13117	3.0	387	1	6	9570	400	2	11402	431
	1024451	WISCONSIN	18	25	11648	3.6	415	16	14	12754	461	1	12603	458
		VIRGINIA	1	1	18640	3.8	714	1	7	12720	504	1	11979	444
	1025361	NEW YORK	1	1	11810	3.5	419	1	24	13120	460			
		PENNSYLVANIA	1	1	8800	4.1	363							
		ILLINOIS	4	5	12469	3.8	470	4	16	13041	479	1	14450	521
		MICHIGAN	1	1	14330	3.4	484	1	10	14960	534			
		WISCONSIN	31	49	11984	3.5	417	30	12	12028	431	1	11627	418
		IOWA	1	4	8918	3.6	316	1	14	10703	394			
		NORTH DAKOTA	1	3	9363	3.5	333	1	7	9080	322	2	8448	306
		VIRGINIA	1	1	11350	3.5	401	1	37	16200	593	1	15413	562
		MONTANA	1	4	11463	3.5	399	1	10	11933	438			
		IDAHO	1	2	11165	3.7	407	1	15	14460	567	2	12830	455
	1028664	ILLINOIS	1	1	13670	4.1	556	1	19	14860	550	1	15053	557
		MICHIGAN	2	2	15745	3.7	575	2	24	13255	483			
		WISCONSIN	16	17	11848	3.6	430	15	12	13059	469	1	12539	458
		MINNESOTA	2	2	10380	4.1	421	2	19	11700	430	1	12732	487
		GEORGIA	1	1	9270	3.6	338	1	18	11720	432	1	15434	538
		COLORADO	1	1	13340	3.4	454	1	12	12400	451	1	12252	453

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. O.AUS.	CONTEMPORARY NO.	AV. MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
	1040535	ILLINOIS	1	1	9630	4.0	384							
		WISCONSIN	1	1	11640	3.8	447	1	21	11730	427	1	12361	459
		MINNESOTA	1	1	17000	3.8	641	1	3	16370	594	1	14704	550
	1046736	PENNSYLVANIA	1	1	14020	4.0	561	1	20	11860	450			
		WISCONSIN	18	25	12961	3.4	446	17	16	11619	415	1	11864	428
	1051059	WISCONSIN	1	2	11730	3.4	400	1	3	12865	429	2	12094	423
	1051847	WISCONSIN	1	2	10665	4.1	441	1	35	13655	487	2	13009	478
		IOWA	2	2	10330	3.7	378	1	8	11220	406	1	11761	432
	1058580	ILLINOIS	1	1	9840	4.0	392	1	10	12130	398	1	12546	456
		WISCONSIN	3	3	13133	3.6	470	2	21	13230	475	1	13327	503
	1061907	ILLINOIS	1	1	13970	3.2	452	1	8	14400	536	1	15053	557
		WISCONSIN	12	12	12348	3.5	438	12	18	12313	444	1	12435	457
		SOUTH CAROLINA	1	1	8350	3.2	267	1	1	12380	377			
	1068248	ILLINOIS	2	2	14300	3.4	477	2	8	12605	462	1	11761	424
		WISCONSIN	27	33	14082	3.6	503	26	12	13302	481	1	12634	455
		IOWA	1	1	11510	3.9	447	1	14	13490	452			
	1080157	OHIO	1	2	9670	3.6	353	1	13	10830	395	1	11881	434
		ILLINOIS	2	3	15958	3.8	601	1	7	9720	380	2	12241	465
		WISCONSIN	53	68	14107	3.5	488	52	12	13094	473	1	12810	470
		KANSAS	1	1	15840	4.5	715	1	31	14180	524	1	13549	493
		TEXAS	2	3	14198	3.4	482	2	15	14515	502	1	13527	465
	1084337	WISCONSIN	1	1	14710	3.4	506	1	26	12870	473	1	12524	467
		VIRGINIA	1	1	12690	3.7	466	1	22	8730	335	1	8818	341
	1094325	OHIO	1	1	16980	3.7	631	1	8	11640	433	1	12535	447
		MICHIGAN	1	1	18490	3.3	615	1	14	12050	427			
		WISCONSIN	17	24	12543	3.5	433	17	11	12696	463	1	12442	454
		IOWA	1	1	13360	3.5	473	1	3	15740	517			
		ALABAMA	1	1	15170	3.7	539	1	37	12600	458	1	13385	497
	1106407	OHIO	1	2	11205	3.5	396	1	7	11180	422	1	11292	420
		ILLINOIS	2	2	10460	3.7	383	1	15	11970	463	1	12034	464
		MICHIGAN	1	3	11947	3.4	409	1	14	10917	416	2	12601	459
		WISCONSIN	17	22	12174	3.5	426	16	16	12490	451	1	11777	425
		MISSOURI	1	1	13130	3.5	462							
		MARYLAND	1	1	9350	3.4	320	1	8	8670	335			
		TEXAS	1	1	10800	3.5	384	1	16	11620	420	1	10878	397
		COLORADO	1	1	10850	3.8	408	1	1	16070	530	1	12252	453
	1116198	OHIO	1	4	13055	3.0	387	1	3	14170	451	3	14657	485
		ILLINOIS	5	8	12230	3.5	433	5	15	12955	469	1	12236	442
		MICHIGAN	1	1	7490	3.2	237	1	38	11030	386	1	11707	404
		WISCONSIN	40	53	11335	3.5	401	40	14	11991	435	1	12495	455
		MINNESOTA	1	2	10670	3.3	350	1	23	12645	454	2	12628	452
		KANSAS	1	2	9875	3.5	347							
		VIRGINIA	1	1	13090	4.0	523					1	11489	429
		GEORGIA	2	2	10920	3.4	364	2	17	11040	401	1	15434	538
	1118017	MASSACHUSETTS	1	2	16540	3.8	625	1	3	13550	482	2	15495	590
		ILLINOIS	5	5	12362	3.8	470	4	5	11555	418			
		WISCONSIN	55	67	12994	3.9	499	52	13	12914	469	1	12548	460
		MINNESOTA	3	4	10777	3.8	401	2	21	11885	457	1	11265	508
		MISSOURI	1	1	9050	4.0	361	1	5	8890	318			
		SOUTH CAROLINA	1	1	11850	3.7	433							
		FLORIDA	2	2	9315	3.7	347	1	18	9370	347			
		LOUISIANA	1	1	15490	3.9	610	1	24	14360	518	1	10595	350
	1125597	ILLINOIS	1	1	11300	3.8	430	1	12	12410	483			
		WISCONSIN	4	4	13498	3.5	453	4	11	12225	457	1	13374	490
		NEBRASKA	1	1	8880	3.8	341	1	3	13160	469	1	13363	509
	1131206	ILLINOIS	1	2	8055	4.6	369	1	4	12320	438	2	12459	464
		WISCONSIN	22	24	12810	3.6	466	21	14	12433	461	1	12643	467
		VIRGINIA	1	1	11990	3.3	401	1	14	14360	778	1	13658	467
	1133192	ILLINOIS	1	1	16520	3.5	576	1	5	15020	527			
		WISCONSIN	3	3	12777	3.8	481	3	17	12073	432	1	12328	452
	1152248	CONNECTICUT	1	1	6620	3.5	228	1	141	9540	370	1	8164	329
		ILLINOIS	3	3	10573	3.3	339	2	12	14630	539	1	12753	466
		MICHIGAN	3	4	9895	3.5	346	3	17	13770	499	1	14214	526
		WISCONSIN	17	19	11681	3.6	428	17	19	13134	475	1	13082	477
		MINNESOTA	1	1	13230	3.8	500	1	34	10720	396	1	11020	412
		MARYLAND	1	1	5940	3.7	219	1	22	12330	459	1	9734	367
		VIRGINIA	1	1	14810	3.5	512	1	31	14770	566	1	12960	494
		SOUTH CAROLINA	2	2	11330	3.9	422	2	29	13330	487	1	13489	492
		COLORADO	1	1	11790	3.3	384	1	12	12530	457	1	12252	453

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				AV. YEARLY HERO		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		ARIZONA	1	1	8380	3.2	271	1	41	11940	414	1	11118	373
	1166105	MINNESOTA	1	1	11970	3.6	436							
	1190396	CONNECTICUT	5	5	19090	3.6	685	2	22	10755	404			
		PENNSYLVANIA	2	2	8240	3.8	304	2	25	10545	385	1	11053	425
		OHIO	1	1	8260	3.6	295	1	7	11740	441	1	11292	420
		ILLINOIS	11	13	10669	3.6	376	9	16	11531	431	1	12142	452
		MICHIGAN	3	3	13610	3.5	481	3	15	13580	489	1	13254	469
		WISCONSIN	147	187	12905	3.5	445	143	13	12768	462	1	12676	460
		MINNESOTA	2	4	16400	3.4	545	2	25	14965	542	2	15495	549
		KANSAS	1	1	15330	3.8	584							
		VIRGINIA	1	2	10470	3.8	398							
		GEORGIA	1	1	4310	3.6	155	1	5	7330	266	1	6573	240
		FLORIDA	1	1	10680	3.6	388	1	92	8090	356			
		KENTUCKY	1	2	11730	3.7	429	1	26	11475	424	2	11849	432
		ALABAMA	1	1	9370	3.5	329	1	32	9040	369			
		TEXAS	5	5	12704	3.4	426	4	18	11303	399	1	13527	465
		COLORADO	1	1	14230	3.6	507							
		WASHINGTON	1	1	13430	3.3	443	1	273	12210	506			
	1197326	SOUTH CAROLINA	50	56	10525	3.7	387	49	67	11053	399	1	11155	396
		GEORGIA	2	4	13115	3.7	479	2	41	10695	398	2	10075	385
	1215792	WISCONSIN	2	2	10430	3.8	395	2	16	11040	392	1	11549	415
		VIRGINIA	1	1	8560	3.9	338	1	18	13370	510	1	11979	444
	1230109	NEW JERSEY	1	1	10030	3.2	318	1	23	12760	469	1	12895	467
		PENNSYLVANIA	1	1	11260	4.2	472	1	16	12940	512			
		ILLINOIS	1	1	14850	4.2	627	1	5	15350	517			
		WISCONSIN	28	29	14118	3.6	507	26	11	12904	463	1	13340	486
		MINNESOTA	5	5	14346	3.4	490	5	6	12524	454	1	13552	517
		ALABAMA	1	1	9230	3.7	338	1	2	9290	342			
	1251676	WISCONSIN	5	5	14086	3.6	512	5	12	13460	498	1	13745	508
		VIRGINIA	1	1	8180	3.7	305	1	21	8760	335	1	8818	341
JER.	521405	WASHINGTON	3	3	8693	5.6	483	3	29	8940	465	1	9189	481
005 GUER	199132	ILLINOIS	1	1	7720	4.7	365							
		WISCONSIN	4	15	6657	4.9	328	1	10	7833	367	1	7521	352
	227790	PENNSYLVANIA	1	5	10048	4.5	448	1	5	9312	432	1	9221	446
		WISCONSIN	14	31	6091	5.1	312	3	6	7515	354	1	5385	270
		KENTUCKY	1	1	5740	4.2	241							
	240064	WISCONSIN	10	36	6280	5.1	317	3	7	7246	353	2	7486	357
	243382	WISCONSIN	29	83	7068	4.9	341	16	9	8255	382	2	7934	365
		MINNESOTA	2	10	7226	4.4	323	1	6	6888	326	4	7963	357
		IOWA	1	3	10110	5.4	545							
	248345	WISCONSIN	17	38	6922	4.8	334							
	248427	WISCONSIN	2	6	6934	4.4	298							
		SOUTH DAKOTA	2	3	6940	4.7	326							
	248483	WISCONSIN	6	28	7703	4.7	362	5	7	7534	332	2	7605	347
	249215	ILLINOIS	1	1	6820	4.5	305							
		WISCONSIN	3	11	6457	4.1	262	2	3	7039	319	1	6257	266
	253979	WISCONSIN	1	2	8155	4.4	353	1	16	6440	307	1	6584	319
		NEBRASKA	1	3	10927	4.6	505							
	256119	WISCONSIN	6	29	7628	4.7	355	3	5	7679	359	2	7854	369
		MINNESOTA	1	8	7891	4.4	350							
		IOWA	1	8	7190	5.9	426	1	4	8050	431			
	264489	ILLINOIS	1	1	8970	4.9	438							
		WISCONSIN	56	134	6944	4.7	325	36	9	7538	349	1	7987	365
		MINNESOTA	2	2	5225	5.1	262							
		IOWA	2	2	9145	4.8	431	1	12	8430	425			
		KANSAS	1	1	8450	4.6	385							
	271040	WISCONSIN	2	3	8698	4.9	422							
		IOWA	1	3	8777	6.3	550							
	273849	PENNSYLVANIA	1	1	9540	4.6	441							
		WISCONSIN	10	48	7915	4.9	385	5	7	7968	362	3	7245	332
		MINNESOTA	1	7	6639	4.6	307	1	4	7177	318			
	282730	WISCONSIN	3	16	11135	4.6	508	3	9	9957	476	1	9894	507

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY NO.	AV. MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
	286184	WISCONSIN	2	2	6400	5.0	314							
	289083	WISCONSIN MINNESOTA	29 1	69 1	7015 9430	4.9 4.6	340 437	28 1	9 10	7225 10170	339 528	2 1	7809 9919	363 479
	289285	WISCONSIN	20	49	7231	4.8	345	8	12	7805	361	2	7488	350
	290779	PENNSYLVANIA OHIO INDIANA WISCONSIN MINNESOTA IOWA COLORADO	1 1 1 68 6 2 1	2 1 1 190 17 2 1	6710 9610 8590 6882 7118 9510 7790	5.8 4.2 4.4 5.0 4.9 5.1 4.8	390 408 381 344 354 480 377							
	297851	WISCONSIN ALABAMA	19 1	53 1	7288 7460	4.7 4.0	342 299	17 1	14 61	8278 7070	393 285	2 1	7885 8295	374 317
	308216	WISCONSIN MINNESOTA	35 1	90 3	6569 5640	4.7 4.2	308 239	21	10	7477	350	2	7694	355
	308620	WISCONSIN MINNESOTA IOWA	3 1 1	3 3 2	9297 7487 9420	5.0 4.3 4.7	465 316 440	3 1 1	7 8 6	9610 6890 9465	465 332 457	1 3 2	8447 7165 9467	418 347 440
	312401	WISCONSIN MINNESOTA	25 2	41 5	6966 8195	5.0 5.2	347 419	23	12	8371	398	1	8357	400
	315423	IOWA	2	2	7420	5.4	400							
	321638	WISCONSIN IOWA	10 1	31 5	7348 9538	4.6 5.0	338 476	4 1	4 2	7476 8250	335 426	1	6660	327
	323252	WISCONSIN	6	24	6398	4.7	304	5	7	7176	340	3	7550	347
	323976	WISCONSIN	10	35	7071	5.0	353	6	22	7229	333	2	6966	318
	326202	WISCONSIN	9	18	7835	4.7	364	9	12	7555	362	2	7782	372
	330167	MISSOURI	6	12	7197	4.5	321	4	3	7447	355	1	8712	405
	334926	WISCONSIN MINNESOTA IOWA	19 5 3	37 7 7	7005 5068 7121	4.8 5.2 4.9	333 266 351	18 5 3	12 7 10	8037 7335 8454	379 347 430	2 1 3	7966 7313 7548	373 352 395
	339322	WISCONSIN MINNESOTA	5 1	9 3	6280 6723	4.9 5.2	305 351	5	15	7237	349	2	7453	366
	340667	WISCONSIN	7	19	7590	4.7	357	7	12	7419	363	2	7662	373
	344209	WISCONSIN	2	6	6210	4.7	296	1	6	7233	350			
	344748	WISCONSIN	1	1	7060	4.8	337	1	1	5710	270	1	5984	294
	347781	WISCONSIN MINNESOTA	3 1	11 4	5647 7498	5.5 4.7	306 351	2	11	8021	395	3	8268	400
	348371	WISCONSIN	19	46	6613	4.6	306	1	3	6150	301	1	8164	382
	349213	WISCONSIN MINNESOTA IOWA NEBRASKA	64 4 3 1	124 8 4 4	7065 6673 7028 9015	4.9 4.9 5.0 4.7	345 331 352 423	59 1 3 1	10 8 6 6	7850 7733 8335 8970	367 365 427 442	2 2 4 2	8029 7551 9197	377 377 462
	349633	ILLINOIS WISCONSIN MINNESOTA IOWA	1 75 6 1	4 188 16 2	6643 7896 7818 6815	5.7 4.6 4.6 4.9	376 362 357 331	1 58 3 1	11 9 4 7	7518 7693 6811 7880	380 357 318 386	2 2 4 2	7483 7902 7670 7946	372 364 370 387
	350371	WISCONSIN	2	6	6269	4.2	265	1	5	7278	320			
	353269	WISCONSIN MINNESOTA	30 2	87 7	7209 8946	4.9 5.3	351 470	22 2	9 6	7282 10597	346 465	2 1	7521 9712	358 388
	354147	PENNSYLVANIA ILLINOIS WISCONSIN MINNESOTA	1 1 35 5	1 1 72 13	6890 9410 7385 6453	5.6 4.5 4.8 4.9	384 419 354 320	1 33 5	12 11 9	9160 8007 6909	457 374 325	2 3	8141 6940	379 335
	355910	WISCONSIN MINNESOTA IOWA	25 5 3	36 6 5	7363 5810 6652	4.7 4.4 5.5	348 252 365	21 5 2	13 6 14	8084 6496 7658	381 298 374	1 1 2	8260 7072 8783	383 336 427
	359912	WISCONSIN	10	22	7307	4.9	356	8	12	8225	381	2	7881	365

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECOROS FROM STATE	OAGHTERS NO.	RECOROS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV. FAT LB.	YEARLY HERO			AV. FAT LB.
								NO. DAUS.	RECORDS NO.	MILK LB.		RECORDS NO.	MILK LB.		
	362239	WISCONSIN MINNESOTA	7 2	14 4	6687 6490	4.9 4.9	322 320	7 1	9 7	7376 7813	355 346	2 2	7587 8017	371 353	
	362642	WISCONSIN MINNESOTA IOWA	7 3 1	16 8 2	7781 6668 6570	4.6 4.8 5.4	355 315 342	7 3 1	11 6 4	7300 7208 7550	348 323 389	2 3 1	8110 7280 8753	380 343 433	
	364825	INOIANA WISCONSIN	1 1	1 4	9170 8323	4.5 5.1	411 428								
	364955	WISCONSIN	1	3	6530	5.4	352	1	11	7473	345	3	7405	35	
	367979	WISCONSIN	7	17	6292	4.9	308	2	11	6493	312	2	6941	325	
	374436	WISCONSIN	12	23	5578	4.9	270	4	13	7331	338	3	6787	318	
	375262	PENNSYLVANIA ILLINOIS WISCONSIN MINNESOTA IOWA	1 1 64 10 4	1 1 121 23 7	10450 5980 7428 7427 7684	5.4 4.4 4.9 4.8 5.3	564 261 360 360 397	1 1 57 10 4	28 10 10 10 10	7280 8690 7777 7945 8453	333 390 370 367 414	1 1 2 2 2	7009 7924 7679 8215	346 377 365 402	
	376743	IOWA	17	35	8481	5.1	432	1	24	9077	433	3	9694	467	
	378817	WISCONSIN MINNESOTA	9 2	13 5	5916 6318	4.9 5.2	285 324	4 1	3 3	6856 6903	313 333	1 1	6104 5864	284 281	
	383136	WISCONSIN	6	9	7718	4.6	353	6	10	7996	380	1	7861	355	
	384931	WISCONSIN	2	2	9495	4.9	465								
	389666	WISCONSIN MINNESOTA IOWA	37 5 1	66 7 1	7042 5822 6650	4.7 5.0 4.5	328 290 302	34 4 1	9 7 12	7590 7393 8620	354 329 436	2 1 1	7966 6965 7412	374 328 358	
	393396	WISCONSIN MINNESOTA	14 1	24 1	7666 7550	4.3 4.3	329 327	12 1	14 13	8375 10490	379 494	2 1	8990 8676	407 412	
	401055	ILLINOIS WISCONSIN MINNESOTA IOWA	1 12 1 1	1 16 2 1	16750 7826 6210 6010	4.6 4.6 4.4 4.7	777 363 270 282	1 9 1 1	2 11 5 5	9440 8463 8015 7640	589 403 326 395				
	402201	WASHINGTON	20	30	8865	5.0	441	13	12	9459	432	2	9011	445	
	407865	CONNECTICUT OHIO ILLINOIS WISCONSIN MINNESOTA IOWA MISSISSIPPI	1 1 1 80 8 1 1	1 2 3 138 13 1 1	9150 12505 9340 7237 7073 6230 6830	5.0 3.4 4.7 4.6 4.7 4.2 5.7	458 422 444 334 331 263 391	1 1 1 77 7 1 1	58 8 23 12 12 3 3	10360 14595 10893 7988 8039 8870	519 501 485 373 392 454	1 1 1 2 1	10159 10442 8099 8143 7506	520 353 391 381 363	
	408568	ILLINOIS WISCONSIN	3 2	8 3	7385 7718	4.9 4.6	358 355	3 2	13 16	8903 8580	420 388	2 2	7354 8464	358 397	
	410998	WISCONSIN MINNESOTA IOWA	54 6 5	89 13 11	7716 8440 8376	4.8 4.9 5.0	371 410 425	49 5 5	12 6 8	8241 7740 7649	390 364 377	2 3 2	8421 7581 8052	393 364 389	
	421254	WISCONSIN IOWA	34 1	53 1	8155 7160	4.8 5.3	389 378	32 1	14 7	7958 8230	381 405	2	8567	410	
	421753	WISCONSIN MINNESOTA	4 2	7 5	8080 8014	4.5 4.6	362 369	4 2	11 6	7970 6800	398 321	2 3	7788 6609	362 319	
	424343	OHIO WISCONSIN	1 1	1 2	8480 8635	4.6 5.3	387 454	1 1	8 12	11600 6685	399 320	1 2	10944 7259	424 349	
	430197	WISCONSIN	27	33	8012	4.8	384	27	15	8377	386	1	9099	423	
	430950	WISCONSIN MINNESOTA IOWA	61 7 4	116 13 6	6979 7087 6327	4.9 5.0 5.0	339 353 413	56 5 4	11 13 7	8066 7641 8894	378 364 453	2 2 2	8196 7979 8064	384 390 391	
	432935	WISCONSIN	20	35	7735	4.8	373	20	15	8523	374	2	8612	402	
	436604	WISCONSIN	2	2	8400	4.8	403	2	12	7575	369	1	7532	362	
	448292	WISCONSIN	6	7	7984	5.4	428	6	12	7926	373	1	8130	377	
	458485	WISCONSIN MINNESOTA	13 3	20 4	8467 9113	4.5 4.8	380 433	13	16	8668	394	1	9053	412	

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECDRS WERE MADE

STUD BREED	SIRE NO.	RECDROS FROM STATE	DAUGHTERS NO.	RECDROS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		AV. FAT LB.
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECDROS NO.	MILK LB.	
	458786	WISCONSIN	1	2	6225	4.6	286	1	11	8145	388	1	8448	403
	472739	WISCONSIN	4	4	7425	5.2	387	3	21	8637	423	1	8258	408
		MINNESOTA	1	1	7580	5.0	380	1	7	8100	411	1	7488	364
		IDAHO	1	1	6800	4.3	295	1	13	7380	355	1	9167	450
	473831	WISCONSIN	9	9	7227	5.0	357	9	7	9144	437	1	9545	444
	481953	WISCONSIN	10	11	7629	4.9	378	10	12	8179	375	1	8417	385
		MINNESOTA	1	1	7500	4.8	361	1	14	7180	325	1	7695	350
	482994	WISCONSIN	1	1	7420	4.7	351	1	15	8480	406	1	9919	458
	483682	WISCONSIN	29	47	8098	4.7	381	28	14	8598	385	2	8992	412
		IDAHO	2	3	7890	5.0	395	2	12	8193	401	2	9137	448
	492616	WASHINGTON	1	1	9680	4.9	477							
	496290	WISCONSIN	9	14	7698	4.8	369	9	13	8001	377	1	8170	382
	500515	WISCONSIN	12	16	7970	4.7	375	12	16	8087	387	1	8762	422
	500744	WISCONSIN	5	8	8178	4.8	389	5	16	8962	412	2	9475	438
	503928	WISCONSIN	15	18	7684	5.0	381	15	16	8425	398	1	9150	440
		IOWA	1	1	4110	5.3	217					1	7412	358
	518316	WISCONSIN	7	10	7753	5.0	384	7	10	8434	403	1	9119	449
	522682	WISCONSIN	3	4	7082	4.7	330	3	10	7065	318	1	8342	394
HOL.	682048	NEW YDRK	1	7	14996	3.8	565					1	13821	525
		PENNSYLVANIA	1	1	13200	3.6	481	1	13	11040	387	1	10889	377
		INDIANA	1	2	10375	3.7	378	1	7	12610	449	2	12350	433
		WISCONSIN	68	210	11398	3.5	393	24	10	10972	391	2	11302	401
		MINNESOTA	12	29	12268	3.5	426	9	8	11291	404	1	10972	398
		MARYLAND	1	4	14065	3.5	486							
		VIRGINIA	1	1	10320	3.0	311							
	733131	PENNSYLVANIA	1	1	7080	3.4	240							
		ILLINOIS	2	3	12633	3.5	442					2	12748	471
		WISCONSIN	34	93	11402	3.4	391	22	8	10909	399	2	11442	413
		MINNESOTA	11	44	11509	3.4	385	10	7	11647	410	2	11425	414
	739797	PENNSYLVANIA	1	2	9500	3.7	344							
		INDIANA	1	1	9230	3.8	352							
		WISCONSIN	11	33	10056	3.7	371	3	8	12172	426	1	11677	406
	749572	WISCONSIN	37	128	12241	3.6	437	24	8	11550	421	2	11612	420
		MINNESOTA	7	36	12346	3.6	451	7	8	11685	414	2	11563	422
	787489	WISCONSIN	32	87	11069	3.6	396	13	8	11201	406	2	11337	402
		MINNESOTA	4	13	10053	3.6	359	4	6	11300	401	2	10937	388
	808496	PENNSYLVANIA	1	1	11950	3.6	435	1	11	11580	432			
		ILLINOIS	2	3	11125	3.8	423	2	16	12408	440	1	12263	439
		WISCONSIN	43	101	10210	3.6	369	38	10	10443	376	2	10468	376
		MINNESOTA	19	59	11574	3.5	404	15	8	11085	394	2	11071	399
	812303	ILLINDIS	2	5	12493	3.6	438	1	1	12790	506	1	11140	415
		WISCONSIN	43	129	10636	3.6	380	19	7	10672	390	2	10711	390
		MINNESOTA	2	6	10584	3.6	369	2	8	11144	392	2	11059	397
		MARYLAND	1	2	13340	4.0	529							
	815176	WISCONSIN	9	23	10431	3.6	374	6	11	11783	412	2	11672	409
		MINNESOTA	1	1	9790	4.2	416							
	822438	NEW JERSEY	1	1	11410	3.9	446							
		PENNSYLVANIA	1	8	9658	3.1	300	1	2	7130	311	3	6863	324
		ILLINDIS	2	8	15152	3.2	480	2	26	12522	451	3	12680	462
		WISCONSIN	33	85	11614	3.5	398	28	7	11920	426	2	12002	430
		MINNESOTA	2	8	13481	3.2	424	1	7	14163	492	4	13870	496
		GEORGIA	1	5	10336	3.4	351	1	6	8620	325	3	7289	268
	822715	WISCONSIN	1	2	9845	3.6	349							
	830955	WISCONSIN	3	14	12257	3.5	429							
		MINNESOTA	2	7	13863	3.7	507							
	836253	WISCONSIN	1	5	11164	3.5	395	1	8	11536	424			
		LOUISIANA	1	2	16545	3.5	574							
	850533	WISCONSIN	7	20	11905	3.4	403	5	9	11411	411	2	10602	385
		MINNESOTA	4	10	10791	3.2	347	1	1	15035	562	1	14105	492

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	AV. RECORDS NO.	YEARLY RECORDS NO.	MILK LB.	HERO LB.	AV. FAT LB.
	857502	NEW JERSEY	1	1	13720	3.4	464	1	28	14980	532	1	15456	584		
		WISCONSIN	9	18	9331	3.5	320	9	9	10275	369	2	10366	368		
		MINNESOTA	1	3	10750	3.5	376	1	7	13950	522	3	13916	493		
		KANSAS	1	2	20687	4.0	820	1	3	17495	704	1	15674	634		
		UTAH	1	2	13655	3.5	475	1	17	12835	463					
	858591	MAINE	1	2	13455	3.6	473									
		WISCONSIN	6	13	10795	3.4	368	5	9	10577	388	2	11862	424		
		MINNESOTA	1	3	13190	3.6	481	1	10	13753	490	3	13676	491		
	858626	PENNSYLVANIA	1	1	13430	4.1	548									
		WISCONSIN	23	64	10612	3.6	387	18	8	10824	386	2	11211	399		
		MINNESOTA	5	9	10113	3.9	391	5	10	11479	410	1	11001	397		
		KANSAS	1	1	10730	3.9	414									
	863593	WISCONSIN	43	130	11227	3.4	379	31	8	11004	398	2	11082	394		
		MINNESOTA	5	13	11795	3.7	435	4	9	10758	394	2	11143	422		
		OKLAHOMA	1	5	11226	3.4	382	1	2	13480	454	2	12535	438		
	868738	WISCONSIN	45	93	10713	3.6	386	42	11	10581	385	2	10805	390		
		MINNESOTA	8	21	10714	3.6	383	7	9	10971	397	2	10719	398		
		MARYLAND	1	2	8985	3.9	349	1	1	8290	413					
		UTAH	1	1	9760	3.6	352	1	11	10710	379					
	871953	PENNSYLVANIA	1	7	12926	4.0	515	1	6	12556	466	5	12348	458		
		ILLINOIS	1	3	10893	3.7	397	1	6	13583	479	2	11733	404		
		WISCONSIN	24	78	10645	3.7	386	21	10	11092	402	2	10876	392		
		MINNESOTA	4	14	11981	3.9	456	3	11	11743	415	3	11419	416		
		UTAH	1	3	9200	3.4	312	1	10	11850	413					
	874106	ILLINOIS	1	3	11043	3.7	409	1	15	11200	418	2	10895	408		
		WISCONSIN	32	55	11082	3.9	424	28	12	11566	418	1	11339	409		
		MINNESOTA	11	18	11989	3.8	456	10	8	12120	446	2	12320	451		
	876822	NEW JERSEY	1	3	11390	3.4	386									
		WISCONSIN	47	126	10025	3.5	349	15	6	10778	375	2	10764	376		
		MINNESOTA	1	1	10590	3.8	399									
	877495	NEW YORK	1	1	10860	3.6	392									
		WISCONSIN	4	11	12395	3.8	475	4	11	11473	409	5	11837	429		
	879934	WISCONSIN	26	46	10541	3.6	378	25	10	10778	387	2	10847	389		
		MINNESOTA	7	21	11419	3.6	404	7	10	11334	431	2	11697	424		
		UTAH	1	2	8845	3.7	332	1	15	10405	381	1	11314	423		
		NEVADA	2	2	12740	3.6	451	2	2	14290	509					
	884652	WISCONSIN	2	5	11550	3.6	407	1	3	10625	374	2	9974	387		
		LOUISIANA	1	3	10117	3.6	357									
	903193	PENNSYLVANIA	1	1	14990	3.7	549	1	13	9750	376	1	12154	456		
		ILLINOIS	3	3	9947	3.7	373	3	15	12357	446	1	12542	448		
		WISCONSIN	109	165	11633	3.7	427	97	13	12299	445	2	12270	446		
		MINNESOTA	9	12	11529	3.7	430	9	9	11981	452	1	11746	448		
		ALABAMA	1	1	8220	3.2	263									
		TEXAS	1	1	11340	3.6	405	1	10	12580	439	1	10856	374		
		UTAH	1	1	8200	4.1	335	1	14	10960	441	1	11510	452		
		WASHINGTON	1	2	10185	3.2	318	1	13	13795	500	1	13374	471		
	904819	WISCONSIN	47	80	11446	3.8	436	42	12	11870	428	2	11683	434		
		MINNESOTA	4	5	10184	3.7	380	2	14	12420	408	1	9232	362		
	905694	PENNSYLVANIA	2	2	11320	3.7	423	2	13	12330	455	1	11859	435		
		ILLINOIS	1	3	13573	3.9	538	1	9	11543	438	3	10784	408		
		WISCONSIN	110	200	11513	3.6	417	106	12	11726	424	2	11774	425		
		MINNESOTA	13	29	12060	3.7	440	13	10	10988	404	2	11352	411		
		MISSOURI	1	1	13600	3.9	531									
		WASHINGTON	3	4	11040	3.5	386	3	22	14410	501	1	11972	425		
	909363	WISCONSIN	21	39	10699	3.6	379	18	8	10395	372	1	10601	392		
		MINNESOTA	8	14	11334	3.4	385	8	9	11953	435	2	11224	403		
		TEXAS	1	1	11030	3.2	350	1	19	11960	413	1	9232	326		
	912280	PENNSYLVANIA	1	1	18120	3.9	711	1	10	13170	511	1	14693	552		
		WISCONSIN	27	60	9837	3.8	376	25	9	11121	397	2	10953	414		
		MINNESOTA	8	16	9008	4.0	357	7	10	11399	414	1	10875	396		
		UTAH	1	2	11275	4.0	449	1	9	9770	362	1	9211	351		
	916471	MASSACHUSETTS	1	1	14160	3.6	506	1	21	13210	486	1	15282	569		
		NEW JERSEY	1	1	7120	3.7	266									
		INDIANA	2	4	11898	3.8	446	2	3	11140	386	2	11827	427		
		ILLINOIS	2	3	12330	3.8	458	2	21	13680	494	2	12500	460		
		MICHIGAN	1	2	11200	3.7	412	1	12	9445	332	2	12655	446		
		WISCONSIN	272	460	12174	3.6	442	256	11	11789	427	2	11879	432		
		MINNESOTA	34	74	11318	3.7	418	34	8	11726	425	2	11767	431		
		IOWA	2	4	10703	3.7	388	2	5	10870	391	2	12100	437		

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY		AV. FAT LB.	YEARLY HERD		AV. FAT LB.
								NO. OAS.	RECORDS NO.	MILK LB.	RECORDS NO.	MILK LB.	
		DELAWARE	1	1	12490	3.3	416	1	12	7820	375	1	8840
		MARYLAND	2	2	11350	4.0	439	2	7	11825	456	1	11467
		TEXAS	1	2	11905	3.8	446	1	15	11610	414	1	10355
		UTAH	3	8	11014	3.9	436	3	13	10646	401	1	10361
923209	NEW JERSEY		1	1	7470	3.7	274						
		ILLINOIS	2	2	9695	4.0	380	2	11	12030	436	1	11767
		WISCONSIN	24	35	8559	3.9	331	21	11	9647	360	1	10102
		MINNESOTA	4	5	10444	3.9	400	3	8	12470	445	1	12913
		DELAWARE	1	4	10860	3.4	366	1	9	10598	361	4	9745
924257	PENNSYLVANIA		1	1	5170	4.0	208	1	9	10300	376		
		INDIANA	1	3	14263	3.6	519	1	2	14453	549	1	16481
		WISCONSIN	75	115	11369	3.8	425	68	11	11421	420	2	11348
		MINNESOTA	14	21	11903	3.8	455	14	10	11387	423	1	11256
		MARYLAND	1	1	12140	3.3	398						
932078	WISCONSIN		28	53	11847	3.6	425	25	12	11186	409	2	11159
		MINNESOTA	20	34	13916	3.5	486	17	44	14974	517	2	10903
		IOWA	1	2	8640	3.5	295	1	5	12565	457	2	12835
		WASHINGTON	1	4	12848	3.4	432	1	19	14688	507	1	16023
946873	WISCONSIN		25	30	12300	3.6	436	25	17	12734	460	1	12546
		WASHINGTON	1	1	10220	4.0	404	1	43	16360	585	1	16481
954677	WISCONSIN		40	54	12244	3.6	437	39	15	11679	424	1	11811
		MINNESOTA	1	1	17510	3.6	634	1	15	13630	503	1	13963
		VIRGINIA	1	1	9100	3.8	346	1	8	9340	354	1	10104
959465	WISCONSIN		3	5	11827	3.6	425	3	11	11025	399	2	10301
969671	WISCONSIN		101	161	12175	3.8	462	94	12	12062	437	1	11670
		MINNESOTA	12	20	11324	3.8	422	12	10	11259	416	2	11577
		TEXAS	1	1	13770	3.4	475	1	17	11970	407	1	10442
		UTAH	1	3	8150	4.5	365	1	14	10917	435	1	11510
971338	WISCONSIN		2	4	9802	3.5	338	2	9	8012	301	2	8428
		MINNESOTA	2	10	10537	3.7	386	2	8	10191	359	5	10005
986239	NEW JERSEY		1	1	12990	3.3	426	1	2	12330	414		
		ILLINOIS	94	131	12967	3.7	481	89	13	12627	458	1	12745
		MINNESOTA	2	3	14650	3.6	515	2	10	14270	491	2	13603
		IOWA	1	1	9720	3.9	381	1	18	13250	472	1	12502
992845	WISCONSIN		1	1	17490	3.8	663						
		KANSAS	5	10	14563	3.6	519	1	37	11460	404	1	13462
1003988	ILLINOIS		1	5	12050	4.1	495	1	14	13578	486	3	13516
		WISCONSIN	16	41	10445	3.8	395	15	8	11249	409	2	11306
		MINNESOTA	6	17	9922	4.0	390	6	9	11299	401	2	10478
1006219	ILLINOIS		3	4	12792	3.5	447	3	16	11603	441	1	12829
		WISCONSIN	52	83	12382	3.6	440	46	13	12074	437	2	12077
		MINNESOTA	3	6	12747	3.6	458	3	10	12476	454	2	12633
		TEXAS	1	2	13225	3.3	436	1	13	11970	447	1	9232
1014925	NEW JERSEY		1	1	12530	3.3	408	1	19	10610	388	1	11423
		ILLINOIS	8	10	13148	3.7	469	7	17	12694	465	1	12867
		MICHIGAN	1	1	14320	3.6	522	1	43	13660	490	1	13254
		WISCONSIN	180	232	12554	3.7	462	175	13	12659	464	1	12630
		IOWA	1	4	13663	3.6	492	1	15	12497	473	2	11941
		MARYLAND	2	2	10665	4.1	434	1	23	10230	451		
		VIRGINIA	1	1	17670	3.7	662	1	28	13460	514	1	12960
		SOUTH CAROLINA	2	2	9225	3.9	354	2	67	9260	340	1	9086
		GEORGIA	1	1	12500	3.8	472	1	84	12890	475	1	13156
		ALABAMA	2	3	9970	3.2	308	1	16	10330	405		
		MISSISSIPPI	1	4	10140	3.6	363	1	18	10993	392	1	11478
		ARKANSAS	1	2	9130	3.6	330	1	34	10600	372		
		TEXAS	3	4	10343	3.7	378	3	23	10572	375	1	10148
		IDAHO	1	3	13437	3.5	465	1	17	15507	560	3	13302
		ARIZONA	7	8	14200	3.6	512	7	31	14594	492	1	13482
		PENNSYLVANIA	1	3	12613	3.6	459	1	13	11177	401	3	10591
		INDIANA	1	1	9280	3.6	330					1	10540
		ILLINOIS	1	1	11020	3.5	389	1	4	11930	411	1	10965
		WISCONSIN	116	155	12011	3.7	444	109	14	11918	433	1	12188
1016212	MINNESOTA		13	16	11882	3.8	455	13	11	12037	445	1	12368
		IOWA	1	1	11710	3.4	403	1	9	9160	323	1	9112
		NORTH CAROLINA	1	1	7810	3.5	274	1	20	10520	386	1	10137
		UTAH	1	2	16705	3.5	592	1	14	15675	571		
1016346	WISCONSIN		17	39	10154	3.5	356	17	11	10338	378	2	10625
		MINNESOTA	4	8	9299	3.7	339	3	7	9318	360	2	9081
		MARYLAND	2	8	9534	3.8	369	2	12	11095	419	4	10611

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV. NO. RECORDS	305-DAY CONTEMPORARY AV. MILK LB.	305-DAY CONTEMPORARY AV. FAT LB.	YEARLY HERD AV. RECORDS NO.	YEARLY HERD AV. MILK LB.	YEARLY HERD AV. FAT LB.
	1017182	WISCONSIN	1	1	12830	3.5	450	1	25	13210	513	1	13603 496
	1020914	WISCONSIN MINNESOTA	67 13	79 22	11122 12735	3.7 3.6	406 457	60 9	15 19	12113 14948	443 552	1 2	12184 445 12136 496
	1062851	WISCONSIN	6	14	10441	3.6	372	6	11	10866	387	2	10981 391
	1062852	OHIO WISCONSIN MINNESOTA MARYLAND	1 6 3 8	1 16 6 18	8990 9356 11513 8858	3.3 3.6 3.4 3.8	294 335 391 330	1 4 2 8	2 14 9 15	9650 10983 10517 10811	323 390 362 402	2 2 2	11006 395 10003 350 10705 399
	1062853	NEW JERSEY WISCONSIN MINNESOTA	2 60 6	5 105 10	10114 10128 11112	3.6 3.6 3.4	361 358 376	57 6	11 11	11076 11283	407 432	2 2	10844 395 11084 427
	1068877	WISCONSIN	3	3	11810	3.5	414	3	19	11883	421	1	11636 417
	1070198	MICHIGAN WISCONSIN MINNESOTA SOUTH CAROLINA	1 50 5 1	1 65 7 2	18610 13558 12982 13250	3.5 3.7 3.6 3.6	656 494 462 483	1 49 3 1	24 16 33 76	15350 12572 14320 10190	538 456 529 390	1 1 1 2	12527 457 13936 513 9794 379
	1079424	WISCONSIN MINNESOTA WASHINGTON	17 2 1	17 2 1	12026 14940 11840	3.7 3.6 3.7	442 560 434	15 2 1	12 11 9	12374 15515 14200	451 575 545	1 1 1	12278 456 15086 567 15097 568
	1080775	WISCONSIN	1	1	9860	3.5	348	1	8	8010	301	1	8524 351
	1090996	MASSACHUSETTS ILLINOIS WISCONSIN MINNESOTA NEBRASKA	1 1 35 7 44	1 2 52 9 84	11300 11905 11652 11734 11111	4.1 3.5 3.6 3.6 3.7	462 412 418 418 407	1 1 34 7 44	7 14 15 13 11	12840 10580 11546 12592 11349	458 387 436 456 409	1 2 1 1 2	15238 502 11694 442 12850 465 11358 408
	1091409	WISCONSIN MINNESOTA IOWA	42 4 1	51 4 1	12733 13458 16730	3.7 3.7 3.4	465 497 573	42 4 1	13 21 6	12131 12475 12890	443 449 464	1 1 1	12052 445 11884 429 13200 472
	1092843	ILLINOIS WISCONSIN MINNESOTA NORTH CAROLINA	1 22 2 1	2 35 2 1	11705 12365 14600 12550	3.6 3.6 3.6 3.5	416 441 521 435	1 22 1 1	20 16 12 7	10540 12440 12270 9230	396 443 456 402	1 1 1 1	12337 444 13963 518 8873 383
	1106334	NEW JERSEY PENNSYLVANIA ILLINOIS WISCONSIN	1 1 4 79	1 1 5 99	10580 15400 14993 12978	3.4 3.7 3.8 3.8	363 565 571 491	1 1 4 75	17 19 10 15	9920 13550 12844 12465	376 510 469 456	1 1 1 1	11423 424 14116 547 14025 509 12482 455
	1109891	ILLINOIS WISCONSIN	1 6	1 6	7950 11957	3.9 3.6	314 432	1 6	2 11	4990 10618	196 401	1	12184 445
	1113778	VERMONT WISCONSIN	1 4	1 4	18920 13645	4.0 3.6	760 484	1 4	38 15	16500 13575	673 488	1 1	14126 585 13276 476
	1118688	WISCONSIN MINNESOTA	3 1	9 5	11500 13532	4.0 3.9	461 530	3 1	15 9	11414 11835	412 443	2 3	11554 411 11874 446
	1133899	WISCONSIN MINNESOTA	13 2	16 2	11924 14230	3.7 3.7	435 516	13 2	13 9	12035 14250	431 526	1 1	12035 458 14192 519
	1145163	WISCONSIN MINNESOTA	10 9	10 9	10917 15917	3.4 3.2	361 503	10 9	16 17	11043 15368	409 541	1 1	10701 403 14365 486
	1152241	WISCONSIN MINNESOTA	68 4	89 5	12785 10480	3.6 3.9	463 411	61 4	13 23	12808 13194	464 489	1 1	12751 463 12203 449
	1169417	WISCONSIN	1	1	14660	4.2	612	1	33	15640	656		
	1189726	OHIO WISCONSIN	2 1	3 1	11800 12380	4.0 4.3	469 527	2 1	26 14	13320 10110	490 427	1 1	12066 420 9418 399
	1196264	ILLINOIS WISCONSIN	1 40	1 52	9160 12247	4.0 3.7	368 453	1 37	18 12	10670 12438	403 468	1	12767 464
	1204748	ILLINOIS WISCONSIN MINNESOTA	1 14 6	1 20 9	12010 12066 12931	3.4 3.5 3.5	413 422 449	1 11 5	14 9 20	10820 12373 13977	399 454 510	1 1 2	10301 389 12561 450 12055 498
	1204749	PENNSYLVANIA WISCONSIN MINNESOTA IOWA	1 67 21 1	1 92 32 1	7710 12376 14793 8590	3.4 3.6 3.6 3.4	265 446 534 297	1 62 17 1	9 15 30 5	9490 12167 14665 10780	345 442 524 396	1 1 1 1	11325 420 12585 456 12193 506 12481 456

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	AV. YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
		1237666	ILLINOIS	2	2	14055	3.8	531	2	8	14205	525	1	13854	502
			WISCONSIN	2	2	8635	3.9	336	1	10	10590	377	1	11979	440
		1239739	ILLINOIS	4	4	10013	3.7	370	4	10	14543	541	1	13723	520
		1243459	WISCONSIN	6	6	13087	3.3	434	6	10	11978	431	1	12354	453
			MINNESOTA	1	1	15880	3.3	528	1	68	16310	596	1	15358	547
		1261422	WISCONSIN	5	5	15054	3.5	525	5	15	13274	500	1	13990	487
JER.		360310	WISCONSIN	1	5	7702	6.0	458							
		375850	ILLINOIS	1	7	7894	6.0	476	1	2	7490	442	1	5821	320
			WISCONSIN	10	39	7365	5.3	384	8	5	6526	340	1	6831	382
		392615	WISCONSIN	1	1	7010	5.5	387							
		408306	WISCONSIN	5	24	6178	5.6	341	2	5	6853	364	5	6668	359
		412781	WISCONSIN	5	13	6641	5.4	358	2	8	6929	378	1	7150	423
		414381	WISCONSIN	1	1	6420	5.6	360	1	8	7340	425			
		416938	WISCONSIN	5	14	6310	5.5	341	2	6	6833	366	2	6660	379
		421058	WISCONSIN	1	3	7430	5.0	375	1	14	7047	375	3	7615	401
		426463	WISCONSIN	18	40	7699	5.3	397	8	5	7686	398	2	7460	394
			MINNESOTA	2	13	8269	5.1	414	2	11	7492	386	6	7903	411
			IOWA	1	3	7880	6.1	485	1	2	10100	561			
		426783	WISCONSIN	13	25	6024	5.3	312							
			NORTH CAROLINA	1	5	6366	5.9	374	1	11	7188	384	2	7385	377
		429684	WISCONSIN	43	90	6843	5.5	377	33	7	7112	379	2	7136	386
			MINNESOTA	10	19	6973	5.6	385	10	10	7251	386	2	7847	412
			IOWA	3	5	8043	5.6	447	1	3	10035	558			
		433561	WISCONSIN	3	12	5769	5.9	339							
		434560	WISCONSIN	3	9	8264	5.2	434	2	11	6830	354	2	7252	372
			MINNESOTA	2	7	6810	5.0	338	2	10	7859	408	3	7453	394
		441250	WISCONSIN	6	11	6478	4.8	310	1	10	7955	434	1	9309	498
			MINNESOTA	2	5	7360	5.6	412							
		446955	WISCONSIN	2	6	5525	5.3	287	2	9	7291	376	4	7235	347
		449719	WISCONSIN	3	6	8038	5.4	434	2	17	7863	421	1	7892	404
			MINNESOTA	1	4	7283	5.6	422	1	6	8147	456	3	7844	445
			IOWA	9	24	8131	5.5	446	5	6	7714	416	2	8055	433
		451848	WISCONSIN	2	4	5750	5.2	302	2	13	7285	390	2	7655	402
		452338	MICHIGAN	1	1	8660	5.2	452							
			WISCONSIN	29	53	7420	5.1	376	24	9	7537	407	2	7530	400
			MINNESOTA	2	8	8420	5.0	416	2	16	7845	387	3	7257	375
		452342	OHIO	1	6	6905	5.2	360							
			MICHIGAN	1	1	4100	5.7	234							
			WISCONSIN	14	31	6759	5.7	381	10	14	7140	377	2	7184	386
			MINNESOTA	3	5	4957	5.9	287	3	7	7117	356	2	6657	350
			IOWA	4	9	7882	5.7	439	4	5	7870	412	2	7877	392
		454188	WISCONSIN	8	15	7240	5.2	372	8	14	7143	382	2	7081	384
			MINNESOTA	1	1	7060	5.6	396	1	20	7300	377	1	5657	286
		454720	WISCONSIN	4	10	8227	4.9	399	1	2	10255	464			
			MINNESOTA	1	1	6960	5.3	373							
		455845	WISCONSIN	19	38	7556	5.5	412	16	10	7621	407	2	8004	431
			MINNESOTA	1	2	8920	4.8	429	1	4	8770	484	1	8851	460
		460686	WISCONSIN	2	4	8849	5.2	450	1	10	8840	460			
		465377	WISCONSIN	2	3	7563	5.2	386	1	7	6995	413			
			MINNESOTA	1	6	8453	4.6	385	1	23	8377	426	5	7994	414
		478724	WISCONSIN	3	4	5623	5.3	301	3	8	7018	361	1	7636	407
		481614	WISCONSIN	5	7	4962	5.9	292	2	13	6570	351	2	7042	376
			MINNESOTA	1	6	8033	5.8	470	1	11	8583	437	3	8204	440
		484992	WISCONSIN	15	30	7249	5.4	388	10	12	6962	367	2	7491	391

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREEO	SIRE NO.	RECOROS FROM STATE	DAUGHTERS NO.	RECOROS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY NO. OAUS.	RECOROS NO.	MILK LB.	FAT LB.	AV. RECOROS NO.	MILK LB.	FAT LB.
	498470	NEBRASKA	21	47	8148	5.2	422	19	10	8927	490	1	9152	490
	506331	WISCONSIN MINNESOTA	28 7	42 9	7375 8203	5.5 5.3	406 429	28 6	13 10	7900 9702	414 476	1 1	8104 9252	428 438
	506502	ILLINOIS WISCONSIN MINNESOTA ARIZONA	1 21 3 2	3 25 4 3	6040 8099 9957 8218	5.3 5.4 4.9 5.2	320 436 486 427	1 17 3 2	20 11 13 12	6810 8440 9820 8610	359 441 473 429	1 1 1 1	7009 8400 10333 8186	362 449 493 399
	516001	WISCONSIN	1	2	5420	5.8	316	1	10	6355	353	2	7439	417
	540148	ILLINOIS WISCONSIN MINNESOTA	1 20 1	1 34 3	6950 7459 9567	5.5 5.5 5.2	384 408 503	19 1	12 21	8009 10415	420 498	2 1	8014 10617	430 452
	542650	WISCONSIN MINNESOTA IOWA	8 1 1	14 1 1	6940 5860 7240	5.5 5.4 5.1	377 317 371	8 1	12 17	7560 8330	398 420	2 1	7635 9080	406 464
	546672	WISCONSIN MINNESOTA	10 2	16 4	7322 8014	5.6 5.3	401 416	8 2	21 19	7651 8893	401 446	1 2	8307 8830	437 430
	549518	WISCONSIN	6	10	7905	5.2	407	5	11	8487	443	1	8061	422
	552599	ILLINOIS WISCONSIN MINNESOTA	1 20 2	1 29 6	9960 7638 9268	4.1 5.1 5.0	407 389 449	1 18 2	27 10 9	6340 7588 8993	300 403 461	1 1 2	7877 8851	422 460
	553621	IOWA	1	1	8460	6.2	525	1	20	8250	406	1	8502	437
B.S.	39130	WISCONSIN MINNESOTA COLORADO	21 4 3	58 10 9	8153 11402 11843	4.4 4.1 4.2	356 460 491	13 3 1	14 8 4	9633 11286 10380	389 471 438	2 3 1	9205 9334 9821	376 379 429
	61099	WISCONSIN MINNESOTA	24 1	42 1	8903 9950	4.1 4.5	365 444	12	10	9670	395	2	8906	357
	62227	OHIO WISCONSIN MINNESOTA MISSOURI WASHINGTON	1 19 2 2 1	1 37 12 3 4	12870 8677 9233 10695 12078	4.0 4.1 4.0 3.8 4.0	517 356 367 398 488	1 11 2 1 1	4 11 14 2 12	12560 9540 9152 7670 11555	525 383 363 342 481	1 2 4 1 3	10388 9403 9619 9538 10893	409 376 385 390 463
	62228	NEW JERSEY OHIO ILLINOIS WISCONSIN MINNESOTA IOWA NORTH DAKOTA NEBRASKA TEXAS MONTANA OREGON CALIFORNIA	1 1 4 85 20 1 2 1 1 1 2 1	1 1 9 167 43 4 3 1 1 1 4 3	4850 12370 10513 9033 11159 6718 7478 12650 11570 8380 9847 11070	4.2 4.5 4.4 4.2 4.2 4.2 4.2 4.0 3.9 4.0 4.3 4.4	205 552 453 381 475 283 311 506 452 337 422 483	1 3 7 71 16 1 1 1 1 1 1 3	4 7 10 10 9 6 3 37 8	12560 10427 10432 11223 9017 14010 11270 9900	525 426 423 464 391 579 437 398	1 3 2 2 3 1 1 1 1	10388 10854 10137 11358 9755 12034 11227 10159	409 437 411 469 416 464 462 435
	66101	WISCONSIN MINNESOTA IOWA COLORADO	24 2 1 1	49 3 2 1	9167 9890 9410 8480	4.3 4.4 4.5 3.9	391 428 426 330	19 2 1	14 4 8	9891 11635 11350	404 470 501	2 1 2	9871 8982 7167	402 356 552
	66934	ILLINOIS WISCONSIN MINNESOTA IOWA NORTH DAKOTA COLORADO	1 24 1 1 1 1	1 58 3 1 1 2	6220 10347 7227 10040 7790 11240	4.9 4.0 3.9 3.8 3.3 3.9	308 416 282 360 260 439	18 1	8 7	10668 9620	433 387	2 2	10447 11162	422 456
	71920	NEW YORK NEW JERSEY PENNSYLVANIA ILLINOIS WISCONSIN MINNESOTA IOWA	1 1 1 1 23 3 3	2 2 1 2 59 4 6	5525 4700 8370 9560 8327 11277 8865	4.0 4.4 4.6 4.1 4.0 4.3 4.4	219 205 388 368 334 479 368	1 21 1 3	6 10 4 6	12075 8767 10000 10223	474 358 395 419	2 2 1 2	9728 8677 10617	387 353 433
	72896	CONNECTICUT NEW JERSEY OHIO INDIANA ILLINOIS WISCONSIN MINNESOTA IOWA	4 1 1 1 3 123 16 2	11 1 4 1 5 287 35 4	13633 7160 7808 10150 12554 10760 10408 10470	4.5 4.1 4.0 3.7 4.0 4.0 4.1 4.0	605 291 313 376 509 453 428 410	1 1 1 3 91 11	4 12 10 10 11 9 27	12965 7603 11853 10509 10628 9180	585 307 507 427 431 359	2 3 1 2 2 2	11672 7928 11903 10087 10296 5407	494 319 519 414 419 392

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY NO. RECORDS	MILK LB.	FAT LB.	YEARLY RECORDS NO.	HERD LB.	AV. FAT LB.
		NORTH DAKOTA	1	2	13985	3.9	540							
		SOUTH DAKOTA	2	5	12740	4.2	528	2	5	12247	522	2	10457	444
		NEBRASKA	2	4	11140	4.3	479	1	4	11980	510			
		SOUTH CAROLINA	1	1	11580	3.1	358	1	5	11240	398	1	11565	440
		COLORADO	2	3	9445	3.7	344	1	9	7830	312			
72898		NEW JERSEY	1	1	12240	4.3	523							
		ILLINOIS	2	3	10500	4.6	478	2	13	12690	550	1	11881	520
		WISCONSIN	25	39	10147	4.1	415	22	11	10532	430	1	9673	398
		MINNESOTA	5	13	9335	4.2	383	3	7	8745	340	2	8505	341
		IOWA	2	4	8774	4.2	373	2	19	11410	469	2	10772	439
		KANSAS	1	1	13430	3.9	521							
		TEXAS	2	2	6105	4.9	306	1	37	11890	470	1	11227	462
73318		CONNECTICUT	5	8	13283	4.3	561							
		NEW YORK	3	6	10017	4.0	402							
		NEW JERSEY	6	13	11512	4.5	514	2	22	10375	407	2	10385	427
		OHIO	1	2	12620	4.1	515							
		WISCONSIN	60	132	10284	4.2	426	53	8	10255	423	2	10121	418
		MINNESOTA	9	25	9752	4.3	424	7	13	10466	430	3	9999	397
		NORTH DAKOTA	1	3	11607	4.2	481	1	16	11940	512			
		NEBRASKA	2	3	10403	4.6	474							
		OREGON	1	1	12510	4.0	506	1	4	10400	456	1	12437	496
76903		ILLINOIS	1	3	10047	4.4	440	1	8	11063	452	3	9643	402
		WISCONSIN	7	14	7481	4.3	315	7	9	8784	350	1	9256	370
		MINNESOTA	1	4	8900	3.7	329							
		IOWA	1	3	7953	4.0	316	1	9	11093	456	2	10590	433
		TEXAS	1	1	9760	4.4	430							
		NEW MEXICO	1	1	11320	4.2	474							
87721		CONNECTICUT	1	1	11600	4.2	483							
		MICHIGAN	1	1	12970	4.5	578	1	6	11650	484	1	10791	459
		WISCONSIN	34	55	11775	3.9	462	31	14	11492	467	1	10983	447
		MINNESOTA	3	8	12502	3.9	479	3	13	11037	461	2	12377	520
		MONTANA	1	1	7460	3.6	270	1	3	9600	408			
104852		ILLINOIS	1	1	13220	3.7	487	1	14	11320	463	1	11903	519
		WISCONSIN	5	5	8572	4.0	335	4	9	11208	438	1	9576	386
		MINNESOTA	1	1	8240	4.1	340	1	8	9030	352	1	9450	386
		KANSAS	1	1	7740	4.1	317	1	18	9350	362	1	8731	360
		TEXAS	1	1	10750	4.3	467	1	37	11750	463	1	7913	311
106761		ILLINOIS	3	4	11120	4.3	475	2	12	10585	452	1	10192	431
		WISCONSIN	11	13	11805	4.1	486	10	12	11674	487	1	10957	452
		MINNESOTA	3	3	12917	3.9	509	3	6	11543	469	1	11532	450
		TEXAS	2	2	13065	3.8	488	2	36	11640	462	1	7913	311
106901		MASSACHUSETTS	1	1	9030	4.7	424							
		ILLINOIS	3	5	11258	4.6	522	3	10	11295	472	1	10830	441
		WISCONSIN	85	135	10670	4.3	459	71	10	10785	438	1	10361	419
		MINNESOTA	15	34	11262	4.2	476	13	9	11142	442	1	11061	444
		IOWA	1	1	10530	4.3	454	1	1	7500	291	1	9799	402
		NEBRASKA	1	1	11220	4.4	499							
		MARYLAND	1	2	11125	4.8	540							
		TEXAS	1	1	11800	4.0	471	1	37	11720	463	1	7913	311
		MONTANA	1	1	10400	5.3	549	1	7	10320	410	1	10791	435
		WASHINGTON	1	1	10730	4.7	502							
107291		OHIO	1	1	10180	4.2	431							
		INDIANA	1	1	2170	4.3	93							
		ILLINOIS	6	12	10857	4.0	432	6	11	10732	436	2	10450	437
		MICHIGAN	1	1	13880	4.0	561	1	15	12650	496	1	13189	509
		WISCONSIN	57	92	11003	4.1	449	46	13	10977	443	1	10871	439
		MINNESOTA	11	22	10008	4.0	406	9	16	10176	406	2	10060	404
		NORTH DAKOTA	1	2	9450	4.6	430	1	32	11130	469			
		TEXAS	2	2	9010	4.1	363	1	37	11260	437	1	7913	311
107915		MASSACHUSETTS	2	3	10550	4.6	487	1	4	15090	600	1	12312	538
		NEW YORK	4	4	12990	4.3	549	3	11	11297	459	1	11536	478
		NEW JERSEY	61	90	11205	4.3	477	35	20	10770	444	1	10563	446
		PENNSYLVANIA	1	1	15300	4.3	658							
		INDIANA	1	1	13000	4.1	527							
		MARYLAND	5	5	10696	4.4	467					1	11510	463
109199		WISCONSIN	14	16	10739	4.1	436	13	9	10513	415	1	10464	413
		MINNESOTA	2	2	9415	4.1	383	2	18	11145	448	1	11031	463
120560		ILLINOIS	3	3	8333	4.0	332	3	11	11100	449	1	11903	519
		WISCONSIN	25	25	11725	4.2	485	23	12	11739	475	1	11064	454
		MINNESOTA	3	3	13580	3.9	530	3	7	12070	475	1	11841	465
		TEXAS	2	2	9560	4.2	392	2	36	11840	467	1	7913	311

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY RECORDS NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
M.SH		18911	MINNESOTA	1	1	3760	3.7	138	1	3	6890	277	1	7608	300
		41637	WISCONSIN	1	2	8515	4.1	345	1	8	7990	325	1	7467	305
		41979	WISCONSIN	2	2	8680	4.4	383							
		49273	MINNESOTA	1	1	6290	3.9	246	1	3	6050	241	1	7608	300
		52365	WISCONSIN	1	2	8695	4.1	352	1	20	9625	365	2	8246	312
		62378	ILLINOIS	1	3	8250	3.9	323	1	7	10207	377	3	8815	330
			WISCONSIN	1	1	8220	3.6	299	1	16	8180	307			
		70159	WISCONSIN	1	1	9400	4.3	406							
		70728	IOWA	1	2	7200	3.6	262	1	9	9320	353	2	5434	389
		71025	ILLINOIS	1	1	6170	4.0	247	1	18	7260	277			
		71059	OHIO	1	3	7360	4.1	303	1	9	7813	312	3	7623	298
			WISCONSIN	5	7	9000	3.8	338	1	5	9450	363	1	7488	291
		73980	MICHIGAN	1	1	11040	4.4	485	1	7	8850	357			
			WISCONSIN	1	1	9090	4.0	366							
		84864	WISCONSIN	1	1	10720	3.8	403	1	14	8920	343	1	8284	310
			IOWA	1	1	6880	3.8	264	1	15	8560	318			
		90821	WISCONSIN	2	3	7513	3.9	286	2	10	8868	339	2	7690	299
			MINNESOTA	1	1	8620	3.7	321	1	6	8590	330	1	7913	317
			IOWA	1	1	8330	4.0	331	1	1	9400	372	1	7990	304
		91056	WISCONSIN	1	1	8520	4.3	365	1	3	8870	366	1	8033	328
		113493	WISCONSIN	4	7	8366	4.4	370	2	14	8382	329	2	6922	337
		119490	MINNESOTA	1	3	10867	3.4	372	1	36	9880	372	3	6140	331
		119644	ILLINOIS	3	4	10447	3.6	382	3	16	10603	398	1	8824	332
		119645	WISCONSIN	2	3	7348	3.8	277	2	7	8485	332	2	7491	292
		155214	WISCONSIN	2	2	11440	3.9	442	2	17	9055	350	1	5107	402
			IOWA	1	2	8990	3.6	322	1	7	6760	258	1	9330	344
		227482	WISCONSIN	1	1	9420	3.7	348	1	15	9880	369	1	10137	397
			IOWA	1	1	5770	4.0	229	1	3	5060	186			
006 GUER		348518	WISCONSIN	9	16	8470	4.6	389	7	14	8242	392	1	8361	396
		359919	WISCONSIN	29	84	8883	4.6	407	24	16	9099	403	2	9024	401
		379025	MICHIGAN	1	2	6535	5.4	350							
		385934	WISCONSIN	15	40	7805	4.9	377	13	10	8621	407	2	8561	404
		385940	WISCONSIN	6	11	7847	4.9	381	6	20	9253	402	2	8488	399
		387701	WISCONSIN	6	16	7001	5.2	362	5	10	8522	389	2	8326	386
		407624	WISCONSIN	16	18	7847	4.8	377	14	12	8602	399	1	8584	401
		433371	WISCONSIN	1	1	9510	4.9	470	1	45	7980	394	1	8666	422
		464097	WISCONSIN	5	6	7897	4.6	365	4	22	9179	413	1	8367	399
		476011	WISCONSIN	2	6	7494	4.7	353	2	8	8274	412	2	7990	384
		476012	WISCONSIN	7	7	8039	4.3	349	7	22	9489	403	1	8658	415
		476013	WISCONSIN	6	6	8067	4.7	381	6	11	8800	407	1	8677	406
		476014	WISCONSIN	2	3	8398	4.2	338	1	10	8410	415	1	7597	380
		476015	WISCONSIN	5	8	7595	4.6	353	5	16	9629	413	1	7975	379
HOL.		878259	INDIANA	1	1	14200	2.9	413	1	11	12680	450	1	11401	390
			ILLINOIS	1	1	13210	3.7	489	1	15	12210	446	1	14246	543
			MICHIGAN	1	1	12970	4.1	532	1	24	15590	543			
			WISCONSIN	67	132	11552	3.7	425	66	12	11736	420	1	11959	430
			IOWA	1	1	11280	4.3	483	1	16	12330	498	1	14966	569
		994806	INDIANA	1	2	12460	3.4	419	1	6	11375	456			
			ILLINOIS	1	2	12580	3.6	454	1	13	14005	520	2	14770	539
			WISCONSIN	61	91	12096	3.7	442	54	12	12312	447	1	12109	439

TABLE 16.—DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS—GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD		
								DAUS. NO.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		IOWA	1	1	13350	3.8	503	1	2	12400	450	1	12720	471
		TEXAS	1	2	9340	3.8	351	1	21	11980	428	2	12121	413
908810		PENNSYLVANIA	1	1	17370	3.9	677	1	21	12850	464	1	12829	479
		INDIANA	1	1	11120	3.9	438	1	5	9960	373	1	11630	416
		ILLINOIS	4	9	11057	3.8	419	4	11	11635	435	2	11171	410
		WISCONSIN	160	292	11769	3.7	432	153	11	12110	436	2	12201	439
		MINNESOTA	1	3	12503	3.2	402	1	17	13057	457	3	13142	473
		VIRGINIA	3	4	12785	4.1	520	2	24	15133	577	1	12606	471
		NORTH CAROLINA	1	1	9080	3.8	342							
		ALABAMA	1	1	11270	3.5	400	1	39	10220	387	1	10290	400
		MISSISSIPPI	4	8	10894	3.7	404	4	15	11816	430	1	10929	394
		IDAHO	1	1	13200	4.0	524	1	10	15440	540			
920541		OHIO	1	2	13710	4.0	545	1	6	14730	558	1	15783	588
		WISCONSIN	30	63	11600	3.8	436	27	14	12399	449	2	11929	437
		MINNESOTA	1	1	7650	3.9	297	1	34	10880	402	1	11020	412
930692		PENNSYLVANIA	1	1	11730	3.1	366	1	19	11510	442	1	12579	480
		OHIO	2	2	10385	4.5	453	2	9	13105	499	1	12519	478
		INDIANA	2	2	17210	4.0	694	1	7	11940	429	1	13658	501
		ILLINOIS	3	8	11138	3.8	418	3	6	12728	480	3	11673	439
		MICHIGAN	1	1	8240	3.4	283	1	19	9280	319	1	9156	329
		WISCONSIN	192	289	12468	3.6	451	186	14	12635	458	1	12409	451
		NORTH CAROLINA	6	9	9858	3.7	360	6	53	10255	373	2	11367	418
		MISSISSIPPI	5	11	9608	3.6	345	4	10	11729	416	1	8546	321
		TEXAS	2	3	12205	3.5	416	2	14	13540	464	2	12061	427
		ARIZONA	1	1	13340	3.5	464	1	46	14780	511	1	13124	486
940354		WISCONSIN	21	37	11157	3.5	383	13	23	11091	406	2	9513	361
946406		ILLINOIS	6	10	11043	3.9	433	6	14	12413	485	1	10393	399
		WISCONSIN	113	172	11753	3.7	436	105	12	12546	452	1	12273	442
		IOWA	1	2	14240	3.7	525	1	4	12510	472	2	12366	464
		MARYLAND	1	1	7120	3.3	233	1	6	7840	281	1	8971	360
		VIRGINIA	2	2	13245	3.8	500	1	38	14890	578	1	13091	491
		MISSISSIPPI	7	10	10375	3.6	376	7	23	11101	398	1	11514	418
		TEXAS	4	11	12821	3.6	463	4	19	11932	426	3	11040	402
		IDAHO	1	1	6760	4.1	275	1	3	8740	338			
959466		NEW HAMPSHIRE	1	1	11570	4.2	482	1	4	13820	524	1	10813	423
		OHIO	1	2	11330	2.9	324	1	1	14630	537	2	11925	416
		INDIANA	1	1	16880	3.4	582	1	9	16500	591	1	14791	543
		ILLINOIS	3	7	14476	3.9	559	3	16	12410	482	2	13870	524
		WISCONSIN	177	314	12914	3.7	474	170	13	12476	454	1	12641	458
		IOWA	6	13	14507	3.7	535	6	10	13479	486	2	13619	493
		NEBRASKA	1	2	14545	4.3	619	1	21	11980	452	1	12230	464
		VIRGINIA	1	1	8830	4.3	379	1	22	8900	339	1	8818	341
		ALABAMA	1	1	12170	3.5	424							
		COLORADO	1	1	16430	3.5	577	1	10	12440	417	1	12372	449
982707		WISCONSIN	9	16	9863	3.4	337	8	18	11545	421	2	11756	428
1004137		ILLINOIS	15	21	14844	3.5	526	14	11	13896	513	1	14448	528
		WISCONSIN	94	135	12970	3.5	456	93	12	12427	450	1	12437	447
		IOWA	1	2	16495	3.4	558	1	12	12975	491	2	12252	475
		MARYLAND	1	1	14900	3.9	582	1	30	10910	390	1	11892	428
1004496		ILLINOIS	4	4	13100	3.9	504	4	16	12470	463	1	13952	517
		WISCONSIN	44	52	12631	3.7	463	44	16	12177	445	1	12334	447
		IOWA	1	1	12280	4.1	507	1	11	12300	455	1	14377	530
		SOUTH DAKOTA	1	1	10400	3.5	367	1	11	9450	347	1	10780	392
		VIRGINIA	1	1	9300	3.8	355	1	22	8880	340	1	8818	341
		TEXAS	1	1	11550	3.3	384	1	14	10280	355			
1013716		NEW JERSEY	1	1	10080	3.7	374	1	17	9940	375	1	11423	424
		PENNSYLVANIA	1	1	13050	3.3	429	1	31	13010	475			
		OHIO	1	3	10837	4.1	449	1	6	14860	538	3	15329	567
		ILLINOIS	1	1	15880	3.8	603	1	9	14090	544			
		MICHIGAN	2	5	11564	3.8	441	2	16	11095	410	1	11314	425
		WISCONSIN	147	256	11566	3.7	422	141	12	11796	425	1	11829	425
		MINNESOTA	1	2	10710	4.0	421	1	30	15275	567	1	11674	407
		DELAWARE	1	1	13390	3.4	455	1	10	12530	465	1	9701	356
		VIRGINIA	1	1	12030	3.4	407							
		WEST VIRGINIA	1	1	11580	3.6	416							
		MISSISSIPPI	1	2	6255	3.6	226	1	16	11750	431			
		ARKANSAS	1	2	9550	3.7	353	1	11	10965	398			
		LOUISIANA	1	1	9910	3.7	364							
		TEXAS	1	3	10760	3.6	386	1	12	13883	488	3	11140	404
		ARIZONA	1	1	11860	4.1	481	1	46	14810	511	1	13124	486
		OREGON	1	6	12718	3.6	455	1	11	12188	495	6	11382	489
1020996		ILLINOIS	6	15	13052	3.7	484	6	11	14073	504	2	13922	497
		WISCONSIN	83	141	12173	3.7	447	74	13	11877	426	1	12101	433
		MISSISSIPPI	1	1	9520	3.1	297	1	15	9750	325	1	8807	311

STUD NO.	Breed	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.			
									NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	NO. RECORDS NO.	MILK LB.	FAT LB.	
			IOAHO	1	4	16113	3.6	586								
		1041846	ILLINOIS	3	9	10974	3.7	407	2	8	11305	426	2	9761	369	
			MICHIGAN	1	2	12060	3.2	386	1	15	11940	420	1	15533	537	
			WISCONSIN	133	242	11458	3.5	397	127	12	11715	418	1	11989	428	
			MARYLAND	1	5	13612	3.7	505	1	11	13205	516	3	13662	524	
			VIRGINIA	1	3	12530	3.8	474	1	8	13220	480	1	13091	491	
			WEST VIRGINIA	2	2	11885	3.5	412	1	35	9370	344	1	9025	336	
			KENTUCKY	1	4	15515	3.2	496	1	39	14413	502	4	12462	437	
			MISSISSIPPI	1	2	11000	3.5	377	1	9	10625	387				
			TEXAS	6	14	11468	3.6	403	6	16	12769	441	2	11400	403	
		1046466	PENNSYLVANIA	1	1	15210	3.6	543	1	19	13560	512	1	14116	547	
			ILLINOIS	8	13	14655	3.7	539	8	11	13496	493	1	14643	529	
			WISCONSIN	121	167	12013	3.7	445	119	11	12360	448	1	12002	432	
			IOWA	1	2	13945	3.7	510	1	12	12165	454	1	12077	448	
			ARIZONA	1	1	11570	4.0	465								
			WASHINGTON	1	2	14795	3.8	552	1	31	15590	544	2	16154	568	
		1057739	NEW JERSEY	1	1	11450	3.7	421	1	17	9860	372	1	11423	424	
			PENNSYLVANIA	1	2	16650	3.6	596	1	12	13015	474	2	14034	516	
			OHIO	1	2	13590	4.1	552	1	10	10435	376	2	10028	354	
			ILLINOIS	11	16	13279	4.0	528	10	19	14201	522	2	14149	515	
			MICHIGAN	2	5	15149	3.8	560	2	17	13522	478	2	14199	491	
			WISCONSIN	145	256	12323	3.8	462	137	12	12238	441	1	12181	436	
			IOWA	1	1	12560	4.1	509	1	29	12590	450	1	12404	450	
			NORTH CAROLINA	1	2	9210	3.5	325	1	76	11000	388	2	12143	429	
			KENTUCKY	1	1	14500	3.3	475	1	9	8900	368	1	9254	389	
			TEXAS	1	1	17270	3.5	606	1	16	14810	492	1	11565	405	
		1061150	MICHIGAN	1	4	15103	3.5	522	1	16	12988	463	2	12590	457	
			WISCONSIN	69	128	11865	3.6	423	64	12	12425	451	1	12384	445	
			IOWA	2	3	8290	3.6	296	1	2	9745	343	1	12382	433	
			IOAHO	1	1	16400	3.3	538	1	29	17510	608	1	15097	534	
		1061172	ILLINOIS	7	8	13859	3.6	503	5	11	13660	507	1	14285	509	
			MICHIGAN	1	1	11920	3.4	401	1	44	10860	404				
			WISCONSIN	156	196	138										

TABLE 16.--DAUGHTER-AVERAGE OF SIDES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECDROS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECDROS NO.	MILK LB.	FAT LB.
007 HDL.	1165815	ILLINOIS	1	1	7270	3.3	241	1	3	8870	345	1	13069	489
		WISCONSIN	22	27	11815	3.7	429	21	15	12202	447	1	12320	447
		MINNESOTA	1	1	13130	3.7	484	1	48	13770	484	1	11674	407
		VIRGINIA	1	1	7870	4.2	328	1	14	9500	361	1	8818	341
	1174532	ILLINOIS	4	4	12903	3.8	487	4	6	13665	491	1	16350	588
		WISCONSIN	16	20	12251	3.6	434	16	19	12925	470	1	12365	446
		NORTH CAROLINA	1	1	15320	3.1	471	1	64	12260	440	1	14268	508
		TEXAS	1	1	13740	3.4	470							
	1186866	PENNSYLVANIA	1	1	7510	3.5	260	1	11	12370	465			
		ILLINOIS	8	8	13129	3.8	504	8	10	11900	446	1	12389	460
		WISCONSIN	106	128	12754	3.7	471	103	13	12470	455	1	12341	447
		VIRGINIA	2	3	11210	3.7	412	1	14	9260	341	1	9134	346
		NORTH CAROLINA	1	2	11425	3.9	437	1	83	10965	385	2	13347	470
		KENTUCKY	1	1	11320	3.6	402	1	5	8680	301	1	11445	413
		TEXAS	1	2	15075	3.7	546	1	22	14110	489	2	11919	423
	1204557	ILLINOIS	1	1	11880	3.9	461							
		MICHIGAN	1	2	12265	3.7	449	1	23	13930	490	2	14105	507
		WISCONSIN	52	56	13118	3.6	477	49	12	12757	466	1	13016	478
		NORTH CAROLINA	1	2	10570	3.3	353	1	83	10975	386	2	13347	470
		SOUTH CAROLINA	1	1	10370	4.0	416	1	71	8820	330	1	9134	350
		KENTUCKY	1	1	12960	3.4	439	1	5	8350	293	1	11118	402
		TEXAS	1	1	15260	3.4	526	1	19	13180	472	1	13527	465
	894536	ILLINOIS	1	1	12000	3.8	453	1	21	13180	489	1	12775	481
		WISCONSIN	10	14	14745	3.8	557	10	5	13136	519	2	12866	482
		IOWA	1	2	16320	3.8	618	1	26	14170	525			
	988993	PENNSYLVANIA	2	2	14535	3.6	522	2	12	13370	477	1	13489	503
		MICHIGAN	1	1	12920	3.7	474	1	11	10110	378			
		WISCONSIN	17	24	11523	4.0	450	14	13	12279	477	1	12869	480
		IOWA	1	3	15167	3.6	546	1	34	15035	570	3	9937	527
	1030323	PENNSYLVANIA	1	1	13000	3.6	471	1	35	13120	490	1	13353	513
		WISCONSIN	6	10	12372	3.9	487	5	15	11797	438	1	12541	457
	1033472	ILLINOIS	2	2	10180	4.5	459	1	7	10620	391	1	12557	479
		MICHIGAN	3	3	6070	4.0	256	3	5	10133	371			
		WISCONSIN	26	36	12665	4.2	525	23	11	12487	476	1	12853	483
		MINNESOTA	4	4	14013	3.5	491	4	6	13888	482	1	13162	467
	1056437	MICHIGAN	1	1	9110	4.4	404	1	3	12940	420	1	11521	428
		WISCONSIN	19	21	12826	4.0	511	19	19	12289	474	1	12733	476
	1056438	WISCONSIN	17	25	12660	3.9	488	16	12	12434	479	1	12430	475
		IOWA	1	2	13285	4.4	577	1	7	11710	428	2	12971	469
	1072819	MICHIGAN	1	1	11780	3.5	408	1	3	10570	404	1	8382	315
		WISCONSIN	7	8	11995	3.8	453	7	12	13379	524	1	12755	466
		MINNESOTA	1	2	16025	4.0	639	1	16	14860	494	1	14704	519
	1125635	PENNSYLVANIA	1	1	9240	3.8	354	1	15	9400	351	1	12666	475
		WISCONSIN	9	10	11662	3.9	458	9	20	12162	468	1	13080	489
	1134208	ILLINOIS	1	1	11770	3.7	436	1	14	13040	521			
		WISCONSIN	2	2	13315	3.5	460	2	28	11495	414	1	12633	452
	1157409	WISCONSIN	2	2	12505	4.0	493	2	14	12900	516	1	14083	537
	1177959	PENNSYLVANIA	1	2	10270	3.9	397	1	17	11435	409	1	13080	467
		MICHIGAN	2	3	8145	3.6	290	2	3	7973	303	1	8884	351
		WISCONSIN	22	28	12488	3.8	475	21	9	13791	545	1	12585	461
		MINNESOTA	2	3	13595	3.7	494	2	18	13945	494	2	12840	469
		MONTANA	1	1	12610	3.9	490	1	8	13570	460			
	1262986	WISCONSIN	1	1	12620	3.9	490	1	7	13340	530	1	14334	565
		MINNESOTA	2	2	17160	4.0	684	2	15	13795	481	1	9527	385
008 AYR.	64660	WISCONSIN	7	21	7239	3.9	280	1	22	10223	402	1	7935	315
	249620	WISCONSIN	58	174	8004	4.9	386	23	10	8702	405	2	8486	402
		WASHINGTON	1	3	13557	5.1	685							
	262790	WISCONSIN	10	22	7436	4.8	358	1	4	9268	438	2	8840	428
		VIRGINIA	1	1	9370	5.2	486							
	327931	ILLINOIS	1	7	7563	5.0	378	1	8	8353	397	6	7970	383
		WISCONSIN	7	23	8884	4.8	424	6	9	9126	421	2	9142	426
	363416	WISCONSIN	4	8	7093	4.8	340	3	16	8571	384	1	8164	382
	HDL. 778235	PENNSYLVANIA	1	1	11010	3.5	390							
		ILLINOIS	5	13	10743	3.6	387	2	17	11015	411	1	11805	426

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREEO	SIRE NO.	RECOROS FROM STATE	OAGHTERS NO.	RECOROS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERO		AV. FAT LB.																																			
									NO. OAUS.	RECOROS NO.	MILK LB.	FAT LB.	RECOROS NO.	MILK LB.																																				
009	JER.	781424	MICHIGAN	1	2	14865	3.1	465	48	13	11754	418	2	12086	427																																			
			WISCONSIN	185	499	11212	3.5	391																																										
			IOWA	1	3	11140	4.1	449																																										
			NEBRASKA	1	6	11510	3.7	429																																										
			NORTH CAROLINA	1	7	12369	3.4	426																																										
		807399	PENNSYLVANIA	1	1	12630	3.9	496	1	10	12590	443	1	13145	471																																			
			ILLINOIS	5	14	11089	3.5	394																																										
			WISCONSIN	119	326	11589	3.5	401																																										
			VIRGINIA	1	1	13590	3.1	418																																										
			INOIANA	1	2	8400	3.6	302								2	16	11441	423	2	11620	422																												
		ILLINOIS	3	8	11476	3.5	407																																											
		MICHIGAN	1	3	9180	3.7	337	1	7	13170	532	1	12175	443																																				
		WISCONSIN	101	233	10451	3.4	359																																											
		VIRGINIA	2	5	10153	3.9	388																																											
		TENNESSEE	1	4	8558	3.5	305																																											
		833969	WISCONSIN	2	7	16306	3.5								566	1	11	14530	513	1	13309	471																												
			839304	INOIANA	1	1	10430	4.1	428	14	9	11702	415	2	12301								431																											
				WISCONSIN	39	140	11505	3.6	408																																									
				IOWA	1	3	11360	4.0	457																																									
			839307	ILLINOIS	1	3	11237	4.3	488	1	13	11930	431	1	10083								358																											
		WISCONSIN		16	57	10581	3.9	408																																										
		842464	WISCONSIN	18	48	11323	3.4	388	16	14	11577	411	3	11067	389																																			
			UTAH	2	4	12349	3.1	386																																										
		864216	ILLINOIS	1	1	12030	4.3	517	20	9	11639	420	2	11683	416																																			
			WISCONSIN	96	264	11656	3.4	395																																										
			MINNESOTA	3	12	12151	3.3	398								2	8	11995	421	2	11778	427																												
			OKLAHOMA	1	1	14450	3.5	512																																										
		009	GUER	439204	WISCONSIN	13	56	7030	5.6	395	1	2	9780	482																																				
338402	WISCONSIN			9	19	7494	4.6	339	3	8	8540	349	2	6858	307																																			
752797	MICHIGAN			1	1	12530	3.8	473	5	8	12378	432	1	11979	438																																			
	WISCONSIN			24	55	10394	3.6	368																																										
	MINNESOTA			1	3	12007	3.6	433																																										
815241	WISCONSIN			15	36	10574	3.5	369	6	10	10700	401	2	10666	396																																			
	TENNESSEE			1	1	8740	2.7	239																																										
873706	WISCONSIN			24	85	11424	3.6	412	15	9	10969	397	2	11707	416																																			
	IOWA			1	8	13560	3.6	490																																										
948138	WISCONSIN			98	311	12996	3.4	443	82	10	12095	425	2	12447	437																																			
	OREGON			1	6	13775	3.5	479																																										
1005212	ILLINOIS			1	1	11730	4.2	497	51	13	12453	439	2	12123	426																																			
	WISCONSIN			54	105	11768	3.5	407																																										
	IOWA			1	2	11060	3.4	380								1	5	11775	507	2	12780	541																												
	MARYLAND			1	3	10290	4.1	422																																										
	ALABAMA	1	1	5270	3.5	183	1	18															7730	308	1	6573	263																							
	MISSISSIPPI	1	1	12760	3.1	400																																												
	TEXAS	1	1	12870	3.7	473																						1	15	9530	318	1	8807	311																
	UTAH	2	2	12435	3.5	432																																												
	ILLINOIS	1	1	13730	3.4	466																													1	11	12740	469	1	12600	477									
	WISCONSIN	6	18	13258	3.6	473																																												
	OREGON	1	4	11763	3.8	449																																				6	9	13209	458	3	14086	497		
010	GUER	254753	WISCONSIN	2	5	8456			4.9	417	1	4	13113	455	1																																		12208	438
		255646	TENNESSEE	1	1	5790			4.2	243																																								
		293474	WISCONSIN	4	13	8121			5.3	423																																								
		301072	WISCONSIN	1	3	6960			5.3	368																																								
		HOL.	688763	OHIO	1	7	12684	3.7	475	1						7	12592	466	1	12971	481																													
	WISCONSIN		7	10	11484	3.6	406																																											
	699161		WISCONSIN	1	5	10926	3.5	386																																										
	708301		WISCONSIN	1	3	10013	3.2	324	1		5	11180	374	1	10388							347																												
			MINNESOTA	1	5	15062	3.6	540																																										
		TEXAS	1	2	10400	3.7	383																																											
	722827	WISCONSIN	3	9	12080	3.6	430																																											

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	AV. RECORDS NO.	HERD MILK LB.	AV. FAT LB.
		781423	ILLINOIS	1	1	8870	3.5	313							
			WISCONSIN	2	4	10583	3.6	385	1	6	9795	329	2	10432	359
		804734	NEW JERSEY	1	3	12227	3.4	415							
			PENNSYLVANIA	2	2	10025	3.2	319							
			WISCONSIN	5	11	10993	3.5	385	1	8	11660	415	1	12273	431
			MINNESOTA	2	3	10875	3.4	357							
		813654	WISCONSIN	5	16	14727	3.5	497	5	15	13180	471	2	12690	447
			MINNESOTA	7	21	12244	3.5	428	6	9	11966	432	2	12481	458
			VIRGINIA	1	1	15150	3.1	472							
			TEXAS	1	2	13570	3.6	483							
		826182	WISCONSIN	1	2	12840	3.8	488							
		832251	WISCONSIN	3	8	10693	3.6	377	1	11	11920	413	1	12197	445
	8-S.	34846	ILLINOIS	1	6	8673	4.1	358	1	1	8200	362			
			WISCONSIN	5	6	7670	4.0	306							
			MINNESOTA	4	11	8622	4.0	349	1	22	10725	444			
011	GUER.	229350	WISCONSIN	14	39	8562	4.1	343	1	8	10253	403	2	9462	369
	HOL.	759931	WISCONSIN	17	50	11018	3.6	396							
		759954	ILLINOIS	1	4	14228	3.4	487							
			MICHIGAN	1	1	10360	3.0	307							
			WISCONSIN	22	58	10715	3.6	379	5	6	11289	418	1	11147	406
	JER.	416764	ILLINOIS	1	1	10460	4.6	483	1	14	10100	518	1	8764	440
			WISCONSIN	6	10	7594	4.6	363	2	17	7190	373	2	7641	396
		438118	WISCONSIN	4	6	6654	5.0	334	1	3	5700	262	2	5581	290
		441751	ILLINOIS	1	5	8306	5.2	428	1	5	9288	513	1	7837	459
			WISCONSIN	11	46	7172	5.0	358	5	7	7657	409	1	8388	442
		448023	WISCONSIN	2	5	7112	4.6	319	2	14	7084	361	1	7270	367
		457554	WISCONSIN	2	6	5847	5.2	304							
012	GUER	224915	PENNSYLVANIA	1	1	7900	4.5	356							
			WISCONSIN	26	51	6297	5.2	327	2	11	8046	389	2	8017	402
		247725	NEW JERSEY	1	1	8450	4.2	357							
			WISCONSIN	17	49	6852	4.9	336	1	2	8925	407			
		261644	MICHIGAN	1	1	8140	5.9	479							
			WISCONSIN	6	15	7342	4.7	347	1	9	6672	311	4	6497	311
		300560	WISCONSIN	3	4	6257	5.0	312							
		317294	WISCONSIN	15	26	5701	4.9	282							
		331984	WISCONSIN	16	36	7606	4.7	355	1	5	6271	293	3	6511	311
			MINNESOTA	2	4	6615	4.5	296	1	4	7413	332	1	8589	422
			IOWA	1	1	9330	4.8	449							
	HOL.	709501	WISCONSIN	20	61	10835	3.4	369	4	10	11355	406	2	10826	380
			MARYLAND	1	13	12325	3.2	400	1	11	11457	420	6	10713	396
			NORTH CAROLINA	1	6	12798	3.3	419	1	2	13274	462	3	13690	486
		725760	NEW JERSEY	1	1	12720	3.1	393							
			WISCONSIN	14	49	11081	3.4	373	2	9	11655	416	3	11709	421
		729166	WISCONSIN	21	51	10720	3.3	348							
		758969	WISCONSIN	1	1	8760	3.4	299							
		761505	PENNSYLVANIA	1	3	11183	3.3	369							
			WISCONSIN	7	16	10512	3.3	349							
		784932	PENNSYLVANIA	1	5	9232	3.8	348	1	6	9390	339			
			WISCONSIN	8	24	9807	3.5	337	1	3	9515	313			
		786950	WISCONSIN	3	7	11027	3.7	407							
		807846	WISCONSIN	27	102	11229	3.7	412	12	9	11741	414	1	11478	405
	B.S.	39593	NEW HAMPSHIRE	1	1	10800	4.1	446	1	18	13710	610	1	9810	425
			VERMONT	3	5	10508	4.2	436							
			CONNECTICUT	2	4	12165	4.4	526							
			NEW YORK	2	9	11403	4.4	493							
			NEW JERSEY	1	2	12360	4.3	522							
			ILLINOIS	1	1	11360	4.6	524							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	YEARLY RECORDS NO.	MILK LB.	FAT LB.
									OAUS.						
			WISCONSIN	46	114	9386	4.2	393							
			MINNESOTA	1	2	15825	3.9	616							
			MARYLAND	1	7	9894	3.8	374							
			CALIFORNIA	1	3	10047	4.3	432							
		55865	WISCONSIN	4	17	10889	4.1	445	1	6	13613	542			
			IOWA	1	2	9510	3.8	357							
		55866	WISCONSIN	8	33	7949	4.3	338	2	7	9042	391	2	9385	396
			NEBRASKA	3	12	6578	4.2	273							
			COLORADO	1	2	12400	4.1	504							
	M. SH	1942850	WISCONSIN	4	15	6387	3.7	237	2	6	7004	265	2	6814	254
013	GUER	207850	WISCONSIN	3	9	8094	4.6	370	1	4	7333	353	1	7532	376
		212910	WISCONSIN	1	2	6330	5.3	332							
	HOL.	674592	WISCONSIN	3	8	10064	4.0	403	1	8	11290	379	1	11445	392
		805117	WISCONSIN	4	6	9605	3.8	364							
	JER.	361871	WISCONSIN	8	32	8030	5.1	412	3	3	7546	393	2	7305	367
		363039	WISCONSIN	1	1	8350	6.3	523							
014	GUER	271646	INDIANA	1	1	10350	4.4	458							
			WISCONSIN	14	36	8408	4.5	373	2	8	8652	384	3	6511	311
		271647	WISCONSIN	5	7	7267	4.5	326							
		287057	ILLINOIS	3	9	7976	5.0	399	2	8	7514	380	1	7249	356
			WISCONSIN	7	21	7184	4.8	341	1	4	6531	310	2	6050	272
		299796	WISCONSIN	4	8	8278	4.5	372	1	2	8195	412	2	8044	397
		303093	INDIANA	1	2	7195	5.4	392							
			WISCONSIN	24	87	7258	4.7	341	9	13	9273	401	2	8960	361
		303096	WISCONSIN	1	7	8470	4.6	392	1	10	7241	331	3	7565	343
		305336	INDIANA	1	2	5570	5.4	301							
			WISCONSIN	8	20	7560	5.0	374	3	4	8413	414	3	8244	441
			MINNESOTA	3	7	5762	5.2	302							
		307042	WISCONSIN	23	72	8858	4.7	411	15	15	9122	397	2	9106	406
		353034	WISCONSIN	2	4	8355	4.9	406	1	33	11010	432			
		379127	WISCONSIN	1	3	7523	5.1	384	1	30	10650	418			
		452648	OHIO	7	11	9484	4.6	436	6	30	10440	475	2	8301	386
			WISCONSIN	6	9	7841	4.5	354	6	30	10036	411	2	7859	385
	HOL.	788063	ILLINOIS	3	5	13043	3.3	429	1	20	11680	423	1	12263	439
			WISCONSIN	88	223	11545	3.4	390	39	13	11271	409	2	11542	409
			NEBRASKA	1	1	7330	3.7	274							
			MARYLAND	2	6	10702	3.5	364							
			VIRGINIA	1	1	9540	3.2	306							
		832249	ILLINOIS	1	1	11480	3.4	392	1	18	11310	416	1	11794	424
			WISCONSIN	58	146	11551	3.4	392	28	16	11657	422	2	11695	400
			KANSAS	1	3	9357	3.3	309							
			VIRGINIA	1	3	6143	2.9	179							
		832250	ILLINOIS	1	2	10670	3.5	369							
			WISCONSIN	48	149	11087	3.5	386	18	10	11928	426	2	12389	442
		832252	ILLINOIS	1	1	7430	3.6	266							
			WISCONSIN	38	108	10912	3.3	365	11	11	11895	421	1	11925	420
			NORTH CAROLINA	1	2	12340	4.5	525							
		837462	WISCONSIN	33	85	12920	3.4	439	24	20	11660	426	2	11964	426
		871203	WISCONSIN	7	13	10805	3.6	386	7	10	13236	464	2	12312	439
		871207	PENNSYLVANIA	2	5	9529	3.5	329							
			WISCONSIN	15	27	10823	3.5	370	1	15	11490	406			
			MARYLAND	1	2	11200	3.1	343	1	7	8665	321	2	10688	403
			WEST VIRGINIA	1	3	11800	3.9	448							
		897864	WISCONSIN	26	78	11401	3.4	393	7	13	12440	447	2	12256	441
		916270	WISCONSIN	8	19	10975	3.6	386	5	7	12531	416	2	12430	422

TABLE 16.—DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS—GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY NO.	AV. MILK LB.	AV. FAT LB.	YEARLY HERD NO.	RECORDS MILK LB.	AV. FAT LB.
		983460	WISCONSIN	30	60	11041	3.6	392	24	18	11649	417	1	12492	446
		986761	WISCONSIN	7	19	11328	3.4	386	7	9	11934	423	2	11397	401
		1008796	ILLINOIS	1	1	10230	3.4	345	1	3	10050	374	1	10290	403
			WISCONSIN	12	23	11377	3.9	433	11	25	12648	462	2	12284	441
		1011098	WISCONSIN	4	8	13138	3.5	460	4	18	11901	440	5	12182	431
		1017183	WISCONSIN	13	31	12004	3.5	415	11	9	11894	420	2	11291	403
			KENTUCKY	1	4	12683	3.4	433	1	2	11127	379			
		1028404	WISCONSIN	11	24	11860	3.5	411	11	32	11895	449	1	13876	488
		1070195	WISCONSIN	1	2	13795	3.3	448	1	15	12495	426	2	11162	368
		1082509	WISCONSIN	2	6	13025	3.2	409	2	11	13479	470	3	14065	472
			MONTANA	1	2	10080	3.1	305	1	3	11620	407			
	JER.	488935	IOAHO	1	2	7675	5.7	434							
			WASHINGTON	4	15	6271	5.7	353	4	6	6043	326	2	5859	310
	B. S.	90019	WISCONSIN	3	5	7457	4.3	319							
015	GUER	245207	WISCONSIN	5	12	6166	4.4	272	1	3	8546	388			
		285845	WISCONSIN	16	37	7275	4.7	343	5	5	8512	385	2	10358	429
	HOL.	653086	INDIANA	1	6	13557	3.6	485	1	4	13873	494	2	12645	435
			MICHIGAN	1	7	11727	3.6	427	1	9	10751	406	4	10827	402
			WISCONSIN	4	12	10985	3.5	384							
		784099	ILLINOIS	2	8	13940	3.7	508	2	23	13768	479	2	12244	437
			WISCONSIN	4	11	13130	3.3	426	3	12	12312	436	1	11292	407
	JER.	397427	WISCONSIN	9	18	6931	5.6	384	6	9	6606	336	1	5733	299
		402215	WISCONSIN	3	8	5788	5.3	307							
016	HOL.	733213	MICHIGAN	1	3	13560	3.5	467							
			WISCONSIN	36	100	10405	3.6	371	12	13	11599	432	2	12186	446
			OKLAHOMA	1	1	12140	3.8	464							
		787934	WISCONSIN	2	3	13483	3.2	430							
		790971	WISCONSIN	3	11	9766	3.5	342							
			VIRGINIA	1	1	12630	3.1	389							
	B. S.	39613	ILLINOIS	1	1	9460	4.2	394							
			WISCONSIN	6	27	9377	4.3	400							
018	HOL.	952603	OHIO	1	3	11377	3.7	421							
			ILLINOIS	1	1	9440	3.1	296	1	10	9700	345			
			WISCONSIN	110	172	13066	3.4	448	100	12	12818	462	1	12644	453
			MINNESOTA	2	4	15977	3.7	586	2	12	11474	429	2	11737	441
			IOWA	3	6	10988	3.8	422	3	14	11728	416	2	12686	456
			SOUTH DAKOTA	1	1	9640	3.6	349	1	15	12780	460	1	13102	482
			NEBRASKA	1	2	9985	3.2	316	1	15	9740	356	2	9696	360
			FLORIDA	1	1	11960	3.0	355	1	18	9270	349			
			ALABAMA	1	2	10695	3.4	368	1	7	7325	300	1	7150	294
		1117001	WISCONSIN	1	4	14340	3.6	513							
019	GUER	192924	WISCONSIN	11	25	6941	4.8	333							
		224997	WISCONSIN	2	3	9900	4.9	477							
	HOL.	590765	WISCONSIN	5	18	11254	3.5	396							
		703880	WISCONSIN	8	23	10429	3.6	374	1	6	9690	363	1	10301	384
		752084	WISCONSIN	1	2	8195	3.8	314							
020	GUER	253901	WISCONSIN	1	1	7810	5.6	436							
075	AYR.	106237	NDRTH CAROLINA	1	1	6890	3.7	253	1	7	9410	387	1	8633	349
	GUER	183294	ILLINOIS	5	14	8173	4.8	385							
		189056	ILLINOIS	1	2	6605	4.1	271							
		192431	ILLINDIS	4	5	5654	5.0	278							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY		AV. MILK LB.	AV. FAT LB.	YEARLY HERO		AV. MILK LB.	AV. FAT LB.
								NO.	RECORDS NO.			RECORDS NO.	MILK LB.		
	203591	ILLINOIS	7	19	8312	5.1	419	1	3	8854	435				
		WISCONSIN	2	15	7363	5.0	362	1	12	7218	350	2	8399	402	
	214348	NEW YORK	4	9	8288	4.9	412								
		INDIANA	2	5	6419	4.8	307								
		ILLINOIS	15	35	7651	4.9	372	1	6	12370	436	1	8960	346	
		WISCONSIN	6	15	6389	3.9	297								
	218782	WISCONSIN	1	2	8390	4.4	365	1	9	8030	335	1	10213	434	
		IOWA	2	2	7825	4.7	372								
	219801	ILLINOIS	5	7	5957	5.3	312								
		WISCONSIN	3	10	7883	4.3	336								
		MISSOURI	1	5	11270	4.6	518								
	228335	ILLINOIS	1	1	4720	5.3	248								
	228902	NORTH CAROLINA	2	7	6962	4.5	313	2	10	8961	312	3	8964	330	
	235626	ILLINOIS	4	9	8518	5.2	439	1	9	10458	481	4	9625	465	
		WISCONSIN	3	12	8444	4.8	402	2	5	8326	414	2	8716	433	
	240902	INDIANA	2	4	5507	5.0	275								
		ILLINOIS	31	64	8015	4.9	387	2	4	9432	459	2	8914	426	
		MICHIGAN	1	1	7750	4.6	356	1	5	7470	336	1	7586	375	
		WISCONSIN	21	43	7060	4.8	334	8	10	8738	397	1	8288	401	
		MISSOURI	1	1	8790	4.3	378	1	1	13840	469	1	10813	427	
		KANSAS	1	1	3860	4.3	165								
		NORTH CAROLINA	2	2	7560	5.2	389								
		GEORGIA	4	11	6116	4.9	289	2	7	6459	270	2	7153	311	
	243801	OHIO	1	3	8213	5.1	417								
		INDIANA	1	1	10710	5.5	586								
		ILLINOIS	6	10	7660	5.1	386								
		MICHIGAN	1	3	8460	5.7	483								
		WISCONSIN	3	13	7801	5.2	405	3	12	7483	359	1	7339	349	
	245978	WISCONSIN	7	16	7719	5.0	384	4	15	8597	421	2	8449	415	
		MINNESOTA	1	3	5953	5.3	317	1	11	6323	307	1	6584	311	
	252524	ILLINOIS	10	25	7462	4.8	355	2	3	10398	437	1	9789	403	
		MICHIGAN	1	1	7250	5.0	363								
		WISCONSIN	27	68	7097	4.7	332	17	9	8284	382	2	8025	371	
		ARKANSAS	1	1	6090	3.5	213								
		COLORADO	1	2	6990	4.5	314								
	254625	ILLINOIS	7	21	7448	5.3	395	1	3	9852	449	1	8415	398	
		WISCONSIN	2	4	8449	5.2	446								
	260741	INDIANA	1	3	8227	5.2	428	1	2	9490	460	1	7270	365	
		ILLINOIS	13	35	8813	5.0	435	8	4	8282	394	2	8686	395	
		WISCONSIN	14	33	7774	4.7	370	4	12	9616	431	1	9955	473	
		IOWA	1	3	8090	4.8	387								
	262679	NEW YORK	1	1	8610	4.8	416								
	263640	ILLINOIS	1	1	5840	5.9	342								
		TEXAS	1	5	8418	5.2	437								
	266272	WISCONSIN	1	1	7920	4.4	346								
	267510	INDIANA	6	18	8931	4.9	426	4	3	8809	415				
		WISCONSIN	2	7	7445	4.1	303	2	12	9343	369	2	9478	371	
	268191	WISCONSIN	3	12	7900	5.1	399	2	8	9151	376				
	273228	PENNSYLVANIA	3	5	6847	5.0	346	1	10	7010	331	2	8311	405	
		DELAWARE	33	124	8238	5.0	408	9	11	8734	399	2	8413	402	
		MARYLAND	1	4	9555	4.6	436	1	20	8685	380	1	6954	318	
	273331	NEW YORK	4	4	7288	4.9	356								
		NEW JERSEY	1	2	6825	4.6	317								
		INDIANA	12	29	7939	4.7	372	9	6	8686	393	2	8612	383	
		ILLINOIS	5	4	10653	4.6	493	2	10	10453	438	1	10677	455	
		MICHIGAN	9	13	8537	4.6	392	8	9	9643	414	1	9569	414	
		WISCONSIN	49	110	7889	4.5	356	43	11	8480	383	2	8622	401	
		MINNESOTA	4	6	6788	4.4	295	4	7	7094	321	1	6726	315	
		IOWA	1	3	10000	5.1	506	1	7	9987	519	3	9432	475	
		VIRGINIA	3	6	9036	4.5	402								
		NORTH CAROLINA	18	43	8109	4.5	364	16	15	8812	395	3	8582	397	
		SOUTH CAROLINA	1	1	8810	4.5	396								
		GEORGIA	11	22	7808	4.5	345	11	22	8884	369	2	8282	339	
		FLORIDA	7	10	9040	4.4	385	6	83	8690	397	2	8338	384	
		MISSISSIPPI	2	3	7145	4.4	316	2	13	6400	291	1	5701	259	

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY DAUS.		CONTEMPDRARY RECORDS NO.		MILK LB.	FAT LB.	YEARLY RECORDS NO.		MILK LB.	HERD FAT LB.
								NO.	RECORDS NO.	NO.	RECORDS NO.						
	276539	INDIANA	5	10	7387	4.7	356	3	4	7808	386	4	8188	378			
		VIRGINIA	4	7	8502	4.8	414	2	57	10050	499	1	9919	512			
		NORTH CAROLINA	5	12	6749	4.9	330	4	14	8002	346	2	6783	321			
		SOUTH CAROLINA	1	2	7455	4.4	325	1	64	7965	390						
		GEORGIA	1	3	5343	4.5	235	1	2	5533	243	1	7249	303			
		FLORIDA	6	20	7627	4.6	348	6	70	8363	384	2	7951	379			
	277922	ILLINOIS	1	2	7035	5.3	369										
	278260	INDIANA	5	13	8878	4.7	416	1	4	8760	427	4	8726	425			
		KENTUCKY	1	1	5630	5.7	322	1	3	7770	391						
	278808	INDIANA	5	9	8602	4.6	401	2	5	9333	447	3	9636	464			
		VIRGINIA	1	3	7457	5.7	421										
		NORTH CAROLINA	9	30	7287	4.7	342	5	9	9099	371	3	8992	369			
		SOUTH CAROLINA	1	2	6455	4.0	253	1	6	7470	336	2	7320	334			
		FLORIDA	1	2	7205	4.5	323										
	279696	INDIANA	2	5	7066	4.8	332										
		ILLINOIS	22	49	8477	4.8	402	5	4	8490	403	2	7878	380			
		WISCONSIN	47	119	7580	4.7	354	26	8	8251	389	2	8134	391			
		MINNESOTA	1	3	5907	4.2	247	1	10	6927	321	2	7004	321			
		ALABAMA	1	4	6380	4.7	298										
		ARKANSAS	1	2	4505	4.0	180										
		OKLAHOMA	1	1	6990	4.9	344										
	279854	ILLINOIS	1	1	6370	4.7	296										
		WISCONSIN	12	32	8490	4.6	385	12	9	8431	402	3	8570	414			
		MINNESOTA	2	6	6497	4.4	281	2	8	6320	298	2	6648	316			
	280380	INDIANA	5	18	7606	5.0	382	3	7	8733	412	3	9296	446			
	281475	ILLINOIS	14	25	7174	4.9	354										
		WISCONSIN	3	7	7997	4.3	348										
	283091	INDIANA	4	6	8488	4.5	380	2	8	9013	435	1	8590	416			
		ILLINOIS	3	9	7906	4.4	350	3	34	8565	399	1	8061	372			
		WISCONSIN	12	27	7590	5.1	380	12	11	8263	393	2	8849	421			
		MINNESOTA	5	9	6839	4.6	319	5	8	7898	359	2	8108	363			
		NEBRASKA	1	2	10110	4.1	411	1	63	10550	500	1	10224	492			
		VIRGINIA	1	1	7250	4.6	332										
		NORTH CAROLINA	15	40	7090	4.8	334	13	16								

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.		
								NO. OAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		NORTH CAROLINA	3	7	7530	4.8	358	2	10	8627	378	3	8359	387
		GEORGIA	2	5	6799	5.0	334	1	14	7898	315	4	7701	316
		FLORIDA	1	1	10850	4.2	458	1	7	10140	470			
	299827	NEW YORK	1	1	5680	5.4	308							
	301080	NEW JERSEY	1	1	3740	4.8	179							
		WISCONSIN	30	67	7353	4.8	346	27	12	8345	381	2	8517	392
		MINNESOTA	3	7	8177	4.7	383	3	5	7781	370	2	8079	399
		IOWA	4	21	8638	4.8	416	1	7	11710	557	2	11113	532
		NEW MEXICO	1	1	9590	5.0	476	1	93	10430	471	1	10268	469
	303522	MASSACHUSETTS	3	3	6830	4.8	326	1	6	7770	366	1	8840	415
		NEW YORK	1	1	8220	4.9	407							
		INDIANA	26	45	8151	4.8	391	17	6	8885	414	2	9127	439
		ILLINOIS	2	3	7095	5.0	355	2	7	10323	468	1	10213	449
		WISCONSIN	26	47	7770	4.9	378	19	11	9307	445	2	9158	442
		MINNESOTA	5	9	8410	5.2	427	5	10	7832	390	2	8102	404
		IOWA	6	7	7247	4.9	354	5	10	8405	403	1	8866	438
		MISSOURI	1	2	13045	4.3	553	1	7	8940	406			
		NORTH CAROLINA	13	19	6904	4.9	337	6	8	7713	341	2	7830	347
		GEORGIA	5	9	6362	4.9	315	1	9	7335	312	1	7172	279
		FLORIDA	8	12	6262	5.1	318	6	36	8210	379	1	7633	353
		WASHINGTON	6	6	8605	5.0	434	6	8	10263	468	1	9052	440
		OREGON	1	1	6720	4.6	311	1	18	11620	457	1	10813	467
	304883	MARYLAND	4	9	7674	5.6	423	1	8	9244	486	3	8477	446
		NORTH CAROLINA	1	2	5915	5.2	309							
		FLORIDA	1	4	9478	5.0	470	1	119	9205	417	3	8582	402
	307079	NORTH CAROLINA	2	5	8343	4.5	374	2	8	8608	358	3	9824	368
	307811	INDIANA	4	11	8260	5.1	417	4	5	8828	420	2	8930	422
		ILLINOIS	1	1	5540	5.6	309	1	9	8040	333	1	8884	359
		VIRGINIA	1	6	8627	5.4	461	1	3	9690	458	1	9712	491
		NORTH CAROLINA	2	5	8789	5.1	436	1	22	8750	430	2	8518	414
		FLORIDA	1	1	5850	5.0	290							
	310692	INDIANA	3	4	6423	4.9	313							
	311407	VIRGINIA	1	3	5427	4.2	230							
		NORTH CAROLINA	2	3	7305	5.2	372	1	9	7770	370	1	6965	328
	311574	NEW YORK	2	2	11070	4.2	464							
		INDIANA	6	14	8571	4.5	385	6	8	8912	425	2	9101	423
		ILLINOIS	7	11	7876	4.4	344	4	9	9243	401	1	9110	403
		MICHIGAN	3	3	9557	4.7	448	3	7	10867	533	1	9952	495
		WISCONSIN	47	106	7785	4.5	352	45	11	8478	394	2	8654	403
		MINNESOTA	14	20	6822	4.7	317	11	9	7501	350	2	7433	352
		IOWA	1	2	4795	5.2	252	1	6	5565	284	2	5979	308
		NEBRASKA	2	7	10520	5.2	542	2	17	10604	518	6	8262	383
		NORTH CAROLINA	6	15	7395	4.4	322	5	15	8605	416	2	7760	367
		GEORGIA	5	8	7290	4.4	323	3	9	9818	414	2	7200	268
		FLORIDA	2	3	6910	4.7	324	2	283	8415	373	1	7870	344
		ARKANSAS	1	1	5520	3.8	209							
	311775	NEW YORK	1	2	7015	5.8	407							
		INDIANA	11	23	8057	5.0	401	7	6	8886	403	2	8789	400
		ILLINOIS	11	22	8825	5.0	444	4	3	9123	462	2	9621	485
		MICHIGAN	2	5	6152	4.9	293	2	20	8865	351	2	9584	386
		WISCONSIN	58	172	8061	5.1	412	52	10	8329	390	2	8461	407
		MINNESOTA	5	14	7648	5.0	381	5	5	8117	383	2	7939	382
		IOWA	1	2	9020	5.3	478	1	5	8400	415	1	11140	516
		VIRGINIA	3	4	6630	5.1	338							
		NORTH CAROLINA	13	27	7415	5.0	376	9	9	7655	338	2	7542	341
		GEORGIA	5	10	7776	4.9	376	4	18	8483	375	2	8820	388
		FLORIDA	8	22	8475	5.1	429	7	65	8398	380	3	7903	365
		MISSISSIPPI	2	4	6914	4.9	341	2	16	7335	330	2	5728	257
	314163	INDIANA	1	2	9820	4.1	401	1	4	7315	332			
		ILLINOIS	4	4	8713	5.3	456							
		MICHIGAN	1	3	10810	4.9	532	1	29	11067	543	2	11020	539
		WISCONSIN	26	67	7688	4.8	366	20	11	7676	362	2	7955	374
		MINNESOTA	5	17	7560	4.6	352	4	6	8080	349	4	8383	358
	315130	NEW YORK	3	8	8779	5.0	441							
		NEW JERSEY	1	1	6140	4.9	302							
		INDIANA	17	42	8404	4.7	392	15	5	9224	416	2	8876	410
		MICHIGAN	3	4	6873	4.5	313	1	4	7110	341	2	8399	416
		MISSOURI	2	4	5443	4.8	257	2	10	6025	294	1	7292	355
		KANSAS	4	7	9279	5.3	494	2	12	8558	422	2	8306	430
		VIRGINIA	4	7	7930	5.0	392	1	10	10490	426			
		NORTH CAROLINA	13	16	5937	4.8	288	9	9	7678	348	1	7355	341
		SOUTH CAROLINA	1	3	7343	5.1	373	1	45	8677	413			
		GEORGIA	7	13	6966	4.8	330	2	30	8257	322	2	8735	345

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY		AV. FAT LB.	YEARLY HERD		AV. FAT LB.
								NO. DAUS.	RECORDS NO.	MILK LB.	RECORDS NO.	MILK LB.	
		FLORIDA	11	25	7391	4.6	335	10	52	8732	402	2	8148 386
		MISSISSIPPI	3	8	6098	4.8	291	3	6	6817	327	1	6656 295
	317354	INDIANA	3	4	7898	4.3	337						
		KENTUCKY	2	3	8108	4.8	380	1	5	6980	357		
	319210	ILLINOIS	3	13	8794	4.8	425	3	14	9298	432	4	9538 446
		MICHIGAN	1	2	10865	4.5	485	1	10	9760	460	2	10078 463
		WISCONSIN	19	41	8006	4.7	376	16	10	8522	386	2	8626 409
		MINNESOTA	2	2	7085	4.9	341	2	9	7860	389	1	8224 394
		IOWA	2	3	9700	4.8	464	1	8	7880	423	2	7478 400
		MISSOURI	5	8	8042	5.0	406						
		KANSAS	1	1	6960	5.7	397						
		UTAH	1	3	8450	5.6	479	1	27	8975	422		
		CALIFORNIA	1	1	6620	4.6	302						
	319654	INDIANA	14	32	8395	4.7	392	5	13	8357	409	2	8525 410
		ILLINOIS	6	12	7922	4.8	375	3	27	9456	441	3	9454 428
		MICHIGAN	2	3	9650	4.7	449	2	4	8135	384	2	9293 435
		WISCONSIN	45	100	7962	4.7	368	39	12	8438	385	2	8424 387
		MINNESOTA	15	32	7577	4.7	352	15	8	7663	360	2	7832 369
		IOWA	2	6	11230	4.6	520	2	10	9462	455	3	7556 497
		NEBRASKA	3	4	8895	5.0	438	3	11	10258	483	1	9340 466
		KANSAS	2	2	7955	5.6	452	1	14	7440	366		
		VIRGINIA	1	2	5510	5.2	286						
		NORTH CAROLINA	4	9	8733	4.8	422	3	8	9107	382	3	9377 390
		SOUTH CAROLINA	2	3	8115	5.1	409	1	4	8100	365	1	7565 343
		GEORGIA	1	5	6460	4.2	269	1	4	9412	346	4	7737 285
		FLORIDA	2	3	6225	4.6	284	2	81	7085	323	1	6938 313
		OKLAHOMA	1	1	4200	4.9	205						
		CALIFORNIA	1	1	7380	4.4	328						
	321462	MASSACHUSETTS	1	3	7403	5.2	388	1	17	11767	459	3	11358 458
		CONNECTICUT	1	2	9310	5.4	501	1	12	8990	464	1	8753 439
		NEW YORK	12	15	7917	5.2	406	4	6	10370	450	1	10904 445
		INDIANA	26	61	7839	4.9	384	24	9	9214	430	2	8706 402
		ILLINOIS	9	22	7822	5.2	408	6	10	8979	444	3	8751 442
		MICHIGAN	6	8	7289	5.3	384	5	7	9566	448	1	9118 441
		WISCONSIN	43	98	7585	5.1	387	38	11	8356	395	2	8812 420
		MINNESOTA	12	27	7659	5.0	387	11	8	7853	374	2	8255 402
		NEBRASKA	3	7	8423	4.8	401	3	8	9750	480	2	8768 421
		VIRGINIA	3	4	6330	4.8	301						
		NORTH CAROLINA	7	13	6439	5.4	346	6	11	9091	390	2	9334 410
		SOUTH CAROLINA	3	4	7258	5.0	359						
		GEORGIA	8	17	8197	5.0	411	6	19	10490	419	2	9338 374
		FLORIDA	15	37	7542	5.0	372	13	80	8135	368	2	7720 355
		CALIFORNIA	1	3	9077	5.2	474						
	321668	NEW YORK	1	2	7795	4.9	384					1	8415 402
		INDIANA	31	74	8359	4.6	400	25	7	9045	422	2	8640 419
		ILLINOIS	1	3	5600	4.9	280	1	7	7233	295	3	6769 271
		MICHIGAN	2	2	9910	4.6	455	2	32	12400	463	1	11936 463
		WISCONSIN	14	21	7638	5.0	378	14	13	8659	409	1	9047 424
		MINNESOTA	4	5	7400	5.2	378	4	5	8325	441	1	8576 413
		IOWA	1	1	8270	4.8	401	1	7	8440	401	1	9069 434
		MISSOURI	1	2	9710	4.5	437	1	11	5560	276		
		VIRGINIA	4	10	7310	5.1	371						
		NORTH CAROLINA	17	43	7943	4.7	372	13	19	8444	368	2	8297 371
		GEORGIA	7	14	7723	4.8	371	5	18	8264	358	2	8116 346
		FLORIDA	16	41	8389	4.7	386	15	70	8708	398	2	8389 396
		MONTANA	1	3	6590	4.6	303	1	20	7605	383		
	323665	NEW YORK	14	38	9272	5.0	455	1	28	9900	474	1	9485 458
		INDIANA	4	7	10147	4.8	466	1	3	10280	432		
		NORTH CAROLINA	2	5	9193	5.1	470						
	325499	NORTH CAROLINA	2	3	7125	4.8	316	1	7	8495	380	2	7968 361
	328852	MISSOURI	3	4	6900	5.0	440	3	8	10782	479	1	10268 463
		KANSAS	2	3	9028	5.2	461						
	330198	ILLINOIS	1	1	9530	3.9	376						
		WISCONSIN	1	1	6280	4.7	293						
		IOWA	1	1	7500	4.1	306						
	331861	INDIANA	4	10	7333	5.0	364	4	6	8681	417	2	8295 406
		VIRGINIA	1	6	10042	4.4	437	1	62	10200	503	2	9380 477
		NORTH CAROLINA	4	11	7970	4.7	375	3	21	8321	392	3	8924 436
		GEORGIA	2	5	7110	5.3	374	1	5	11043	361	3	8542 309
		FLORIDA	1	3	10853	4.7	517	1	43	9740	431	2	9685 429
	333200	ILLINOIS	6	15	8126	5.1	422	6	16	9908	418	2	9508 416
		WISCONSIN	18	32	7602	5.2	395	16	14	8334	387	2	8453 398
		MINNESOTA	5	8	5292	5.7	300	5	8	8082	376	2	7469 355
		IOWA	1	3	8260	5.5	456	1	11	10165	454	3	9970 447

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.			
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	
		MISSOURI	1	4	8013	5.6	453	1	12	8073	417	4	8012	395	
		FLORIDA	1	1	6450	5.0	320	1	170	7150	322				
		NEW MEXICO	1	3	9857	5.0	496	1	35	8815	442	1	9123	434	
		WASHINGTON	1	1	7560	5.0	380	1	10	8660	401	1	9712	501	
		CALIFORNIA	1	3	10257	5.9	603								
334545		OHIO	2	4	7160	5.1	366	2	10	8823	380	2	8759	375	
		INDIANA	10	24	8842	5.0	443	9	9	9316	427	2	9107	419	
		ILLINOIS	3	9	7355	4.8	352	2	13	8523	394	3	7923	380	
		MICHIGAN	5	11	8770	5.0	440	5	10	9130	420	4	9934	471	
		WISCONSIN	49	149	8109	5.0	405	47	11	8212	393	2	8406	402	
		MINNESOTA	8	14	6964	5.4	376	8	7	7269	337	2	6781	320	
		IOWA	2	6	7780	5.3	411	1	9	8352	394	4	8001	380	
		MISSOURI	1	2	7885	5.4	420	1	1	6350	340				
		NEBRASKA	1	6	10082	4.8	469	1	5	8178	413	4	9072	453	
		VIRGINIA	1	2	6860	4.8	330								
		NORTH CAROLINA	1	1	9480	5.0	478	1	17	9670	383	1	10224	409	
		SOUTH CAROLINA	2	7	8120	4.7	376	2	20	7743	362	1	7074	334	
		GEORGIA	3	6	7408	5.1	378	2	33	10160	423	1	9723	382	
		FLORIDA	8	22	9108	4.8	438	8	110	9164	415	3	8426	385	
		NEW MEXICO	1	3	11670	5.4	638	1	6	9450	465	1	9723	477	
		WASHINGTON	2	4	7442	5.0	368	2	9	10174	443	1	10268	442	
		CALIFORNIA	1	2	7835	5.4	418								
335786		INDIANA	9	23	8148	4.9	397	9	4	8456	406	2	8372	403	
		MICHIGAN	1	1	6860	5.3	362	1	4	8510	356	1	8633	386	
		VIRGINIA	1	1	9890	4.4	438								
		NORTH CAROLINA	7	19	6648	4.6	304	7	16	7263	325	2	7452	326	
		GEORGIA	3	5	8221	4.7	384	2	9	8399	350	2	7004	312	
		FLORIDA	11	36	8163	4.5	363	11	66	8591	393	3	8243	383	
		TENNESSEE	1	4	7025	4.7	329								
338467		NEW YORK	1	3	10393	4.5	472								
		NEW JERSEY	1	2	6410	4.2	270								
		INDIANA	8	12	8717	4.7	400	7	10	8897	419	1	8943	421	
		ILLINOIS	4	4	6440	4.8	308	3	14	8353	425	1	10028	421	
		MICHIGAN	1	3	11007	4.7	515								
		WISCONSIN	43	88	8559	4.8	410	41	13	8452	396	2	8817	416	
		MINNESOTA	11	27	7397	4.9	350	11	7	7245	356	2	7293	352	
		IOWA	2	3	11350	4.4	504	2	12	9823	430	1	10339	439	
		MISSOURI	1	2	7250	5.5	389	1	7	8170	430	1	7968	358	
		NORTH CAROLINA	14	37	7990	4.8	381	14	12	8795	409	3	8203	389	
		GEORGIA	8	11	6519	4.7	304	7	46	7908	319	1	8213	325	
		FLORIDA	8	10	9129	4.6	414	8	93	9203	424	2	8808	416	
		MISSISSIPPI	1	5	9868	4.5	441	1	7	8130	374	2	7794	377	
		WASHINGTON	4	5	9668	4.7	456	3	12	8633	430	1	9739	475	
339378		NEW YORK	5	9	7504	4.9	364								
		NEW JERSEY	1	3	7003	4.8	340								
		INDIANA	23	42	8544	4.6	411	18	7	8444	405	2	8783	411	
		MICHIGAN	3	10	8742	4.7	408	3	8	9632	437	2	10094	462	
		WISCONSIN	5	6	7370	4.9	357	5	8	7877	362	1	8476	380	
		VIRGINIA	8	18	8045	5.1	405	2	33	8910	476	1	9538	475	
		NORTH CAROLINA	33	65	7572	4.8	358	33	10	8166	361	2	8185	367	
		SOUTH CAROLINA	4	10	6966	4.7	325	2	11	8070	381	1	7140	332	
		GEORGIA	11	19	8043	4.6	382	10	16	9256	403	2	8863	377	
		FLORIDA	14	32	8006	4.9	394	12	74	8638	400	2	7966	378	
		MISSISSIPPI	2	4	10523	4.7	493	2	9	8855	418				
346295		MASSACHUSETTS	2	4	11165	4.6	507	2	18	11955	476	2	11320	452	
		NEW YORK	5	6	8916	5.1	454	3	32	8722	431	1	9216	450	
		NEW JERSEY	2	2	8985	4.5	405	2	21	8555	417	1	9538	423	
		INDIANA	1	2	7690	5.2	396	1	6	7910	369	2	8023	390	
		ILLINOIS	1	1	4240	5.2	219								
		MICHIGAN	4	6	8839	4.9	427	4	7	9468	411	1	9618	437	
		WISCONSIN	39	69	7474	4.9	365	21	14	8828	416	2	8693	417	
		MINNESOTA	8	19	6855	5.3	360	8	9	7900	384	3	8027	389	
		IOWA	1	1	6430	5.3	342	1	13	5910	292				
		MISSOURI	2	4	8109	5.0	409	2	5	8659	394	2	8942	421	
		NEBRASKA	1	1	8110	5.9	480	1	14	9760	472	1	8622	437	
		KANSAS	1	1	8580	5.4	461								
		VIRGINIA	1	1	6230	4.6	287								
		NORTH CAROLINA	2	3	7223	5.5	395	1	14	8625	393	1	8524	392	
		GEORGIA	1	1	5930	4.6	273	1	34	12230	446	1	10333	393	
		FLORIDA	6	13	8047	4.7	374	6	87	9090	414	2	9074	426	
		ALABAMA	2	3	5720	4.7	266								
		MISSISSIPPI	1	1	6090	5.2	318	1	23	6810	322	1	4796	225	
		MONTANA	1	1	5370	5.5	293	1	15	8260	402				
346779		INDIANA	21	39	8061	4.8	366	18	7	9190	419	2	9006	416	
		MICHIGAN	1	1	6830	4.4	299								
		VIRGINIA	3	5	7044	4.8	340								
		NORTH CAROLINA	10	18	6744	4.8	319	9	6	8490	362	1	8042	363	
		SOUTH CAROLINA	1	1	5240	4.5	235	1	48	7000	311				
		GEORGIA	10	21	6814	5.0	336	7	25	9374	373	2	9025	362	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREEO	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO		
								NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		FLORIDA	6	14	7758	4.9	372	5	58	8701	408	2	8203	396
		MISSISSIPPI	2	4	8940	5.1	452	2	8	9690	461	1	9761	465
349272		NEW YORK	2	3	8535	4.5	383	1	31	11940	467	1	13113	494
		INDIANA	19	32	9139	4.6	418	15	7	8261	383	2	8432	382
		ILLINOIS	4	10	8448	4.6	382	2	11	9739	414	2	10061	438
		MICHIGAN	7	15	8573	4.7	399	7	9	9825	455	2	9861	452
		WISCONSIN	41	87	8148	4.8	388	37	11	8390	389	2	8731	411
		MINNESOTA	7	19	7623	4.9	369	6	6	7529	373	3	7641	366
		NEBRASKA	4	6	8474	4.5	374	3	21	10997	459	1	11096	472
		VIRGINIA	3	6	8486	4.8	397	1	2	9053	436	1	8785	447
		NORTH CAROLINA	16	24	7284	4.7	337	16	9	7683	331	1	8604	364
		SOUTH CAROLINA	2	4	8159	4.7	380	1	41	6680	305	1	7477	346
		GEORGIA	11	21	7603	4.8	354	7	20	9731	408	2	8349	347
		FLORIDA	6	9	7998	4.5	358	6	68	8635	389	2	7822	361
		MISSISSIPPI	2	7	6700	5.1	339	2	14	7034	326	2	7077	328
		WASHINGTON	1	1	9400	4.9	465	1	3	7770	376	1	9003	446
		OREGON	1	1	8970	4.5	401							
350867		NEW YORK	11	28	8299	4.9	407	1	3	9760	476	3	9748	469
		NEW JERSEY	1	2	8715	5.3	465							
		INDIANA	14	24	7775	4.7	364	9	7	8622	388	2	8692	392
		ILLINOIS	2	2	10130	4.8	483	2	6	9000	437	1	9211	426
		MICHIGAN	1	1	6440	5.6	361							
		WISCONSIN	1	1	7720	4.0	306	1	18	10530	521	1	9472	464
		VIRGINIA	5	11	7433	4.8	357							
		NORTH CAROLINA	15	39	7925	4.9	385	13	7	8429	389	2	7596	355
		SOUTH CAROLINA	1	1	7150	4.7	336	1	7	7910	354	1	7565	343
		GEORGIA	4	12	5794	4.8	281	3	3	5632	246	3	4714	187
		FLORIDA	8	18	8298	4.8	396	7	36	8500	390	2	8165	376
		MISSISSIPPI	2	2	5940	4.8	277	2	14	8695	314	1	5608	253
351118		ILLINOIS	1	2	7685	4.3	329	1	8	10565	465	2	10895	452
		WISCONSIN	5	10	7710	4.7	363	5	8	8496	403	2	8635	413
		IOWA	1	2	8860	5.1	452	1	15	9575	492	2	8987	464
352592		NEW YORK	12	21	8197	5.0	403	4	13	8709	420	1	9022	445
		ILLINOIS	2	5	7284	5.1	373	1	5	11690	424	1	8960	346
		WISCONSIN	23	59	7661	4.9	376	22	11	8635	405	2	8840	411
		MINNESOTA	4	7	7762	4.7	366	4	4	7318	352	2	8579	405
354073		MASSACHUSETTS	1	1	5630	4.8	271	1	16	7410	387			
		NEW YORK	1	2	9980	4.4	441							
		NEW JERSEY	2	5	8564	4.8	408	1	1	7917	389	3	8789	412
		OHIO	1	2	8470	4.8	409	1	105	9600	477			
		ILLINOIS	8	21	8650	4.8	412	6	13	9456	437	2	8330	387
		MICHIGAN	3	8	7867	4.8	377	3	5	10074	424	3	10361	432
		WISCONSIN	85	163	8346	4.9	405	71	11	8669	398	2	8851	415
		MINNESOTA	11	22	8578	4.9	421	11	7	8451	404	2	8486	398
		IOWA	1	2	11540	4.1	475	1	3	8080	358	1	9200	405
		NEBRASKA	1	1	9430	5.5	520	1	14	9660	469	1	8197	411
		KANSAS	1	3	9767	5.6	552							
		NORTH CAROLINA	3	5	8057	5.0	401	3	14	9312	417	2	9282	391
		GEORGIA	5	7	8819	5.0	444	5	14	10047	379	1	9294	385
		FLORIDA	3	4	8067	4.2	333	3	114	8290	374	1	8878	390
		IDAHO	1	2	7575	4.5	334	1	8	13145	509	1	11587	444
		WASHINGTON	3	4	9280	4.9	455	3	14	9225	426	2	10249	480
		OREGON	3	4	8607	5.3	451	3	11	9708	454	2	9922	456
354977		ILLINOIS	3	7	9519	4.4	422	2	17	10005	464	2	9963	461
		WISCONSIN	34	73	7666	4.5	346	32	11	8377	392	2	8682	401
		MINNESOTA	10	17	8142	4.4	353	8	7	8334	383	2	8037	375
		NEW MEXICO	1	1	9810	4.4	434							
		WASHINGTON	1	2	10655	4.1	434	1	2	12190	559	1	9200	422
356455		ILLINOIS	1	1	7790	4.8	372	1	4	8940	398	1	9211	465
		WISCONSIN	3	7	9383	5.3	495	3	6	8393	363	3	8712	415
		MINNESOTA	1	2	7670	4.9	374	1	7	7525	379	2	7674	386
		WASHINGTON	1	4	9628	4.9	472	1	4	10335	468	1	9843	455
363158		MISSOURI	4	5	9028	4.9	444	4	7	8300	407	1	9334	446
		NEBRASKA	1	1	10640	5.3	566	1	10	10200	525	1	9483	472
		KANSAS	3	4	6733	5.5	372	1	15	7530	364			
364307		NEW YORK	2	4	9162	4.7	428	1	30	9490	453	3	9490	460
		INDIANA	19	50	8410	4.9	410	15	7	9512	443	2	9372	439
		MICHIGAN	3	7	9079	5.0	450	3	9	10516	441	1	10944	459
		WISCONSIN	11	13	8734	4.9	432	7	13	8596	409	1	8730	417
		MINNESOTA	1	1	11440	4.5	520	1	5	10480	522	1	10170	493
		IOWA	1	2	8290	4.8	392	1	6	8165	400	2	8562	394
		VIRGINIA	1	1	9150	4.9	445	1	7	8850	408	1	8458	395
		NORTH CAROLINA	12	24	7536	4.7	360	11	16	8325	370	2	8243	378
		GEORGIA	7	10	8203	4.4	365	6	34	10014	388	2	9326	364
		FLORIDA	6	13	9054	4.5	401	6	153	9127	409	2	8483	392
		MISSISSIPPI	3	5	8480	4.8	413	3	16	7482	348	1	4796	225

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.		
								NO. OAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		UTAH	1	4	8280	4.7	384	1	30	9488	437			
		CALIFORNIA	1	1	8200	4.9	405							
365001		NEW YORK	4	4	10103	5.2	518	2	12	9620	428	1	9903	452
		INDIANA	3	4	8743	4.6	398	2	13	8160	406	1	7837	374
		ILLINOIS	3	5	8602	4.7	409	2	6	10199	383	2	8987	348
		MICHIGAN	8	8	6978	5.1	346	8	13	9643	431	1	10085	442
		WISCONSIN	8	16	7924	5.2	417	8	17	9273	429	2	9378	431
		IOWA	1	3	8543	4.9	411	1	3	8005	376	3	7670	357
		MISSOURI	2	4	7790	5.5	428	2	14	8950	438	2	9094	444
		NEBRASKA	3	6	6976	5.7	390	3	3	7714	372	1	8442	424
		NORTH CAROLINA	2	4	8115	5.0	401	2	6	11430	478	2	10356	440
		GEORGIA	3	3	4540	4.7	215	3	10	7543	317	1	8211	333
		NEVADA	1	1	6520	5.3	346							
		CALIFORNIA	1	1	6460	4.4	282							
366082		WISCONSIN	10	20	8196	4.8	392	6	12	9503	463	2	9103	445
		MINNESOTA	6	13	9083	4.5	403	6	10	9176	433	2	9119	422
		IOWA	1	4	8925	4.4	395							
367978		ILLINOIS	3	3	10820	4.5	481	2	6	11455	425	1	11740	447
		MICHIGAN	2	2	10225	4.6	466	2	4	9535	405	1	10012	457
		WISCONSIN	40	59	8675	4.8	410	27	19	8627	397	1	8620	406
		MINNESOTA	20	40	8578	4.8	412	19	9	8431	401	2	8506	407
		MISSOURI	1	1	13390	5.1	685	1	14	10010	503	1	10998	533
		WASHINGTON	1	2	13570	4.0	545	1	4	8110	366	2	7788	326
370279		NEW MEXICO	1	3	8413	5.2	437	1	35	8680	445	1	9123	434
		WASHINGTON	6	20	10206	5.2	527							
		OREGON	1	3	6737	5.1	344	1	14	9460	461	1	9418	445
		CALIFORNIA	1	1	6260	5.3	331							
371883		NEW YORK	1	1	8750	4.4	389					1	10399	403
		NEW JERSEY	1	1	7260	4.4	316							
		INDIANA	1	2	9620	4.2	405	1	3	6735	351	1	9995	488
		MICHIGAN	2	3	6998	4.3	299	2	9	11153	453	2	10947	463
		MISSOURI	2	2	7895	4.8	373	2	17	9095	474	1	8252	407
		NEBRASKA	1	1	8330	4.4	368	1	3	6070	334	1	7532	387
		VIRGINIA	1	1	8100	4.3	352	1	6	8770	421	1	9745	428
		NORTH CAROLINA	2	2	7185	4.8	342	2	23	8725	362	1	8731	359
		GEORGIA	9	14	7506	4.4	335	9	33	8257	349	2	7810	336
		FLORIDA	6	6	7847	4.5	346	6	136	9443	430	1	8998	422
375956		ILLINOIS	4	5	6236	4.7	288	4	7	9770	416	1	8483	368
		WISCONSIN	24	34	8189	4.7	376	24	19	8663	400	1	8774	408
		MINNESOTA	4	4	9173	4.7	415	3	6	9803	489	1	9974	477
		IOWA	2	4	8459	5.0	418	2	15	7214	353	3	8789	423
		WASHINGTON	1	1	7870	5.1	402	1	8	9150	436			
376019		NEW YORK	1	1	8490	4.6	387							
		INDIANA	2	4	9844	4.4	429	1	5	11185	614	2	10529	546
		NORTH CAROLINA	4	9	6300	4.9	309	4	38	9515	401	2	8607	382
		GEORGIA	4	6	6247	4.7	295	4	15	8961	351	1	8919	352
		FLORIDA	6	11	8626	4.6	396	6	144	9571	433	2	9295	433
378211		MICHIGAN	2	4	8967	5.6	502	2	8	9937	462	2	9838	460
		WISCONSIN	26	35	7770	4.9	380	16	10	8240	391	1	8208	389
		MINNESOTA	26	54	7933	5.0	396	26	9	8250	403	2	8332	405
379201		NEW YORK	2	4	9427	4.8	453	1	1	11640	437			
		INDIANA	5	9	10083	4.5	453	4	10	9255	421	1	9557	436
		MICHIGAN	2	2	7530	5.0	362	2	8	7490	382	1	9320	450
		NEBRASKA	1	1	6380	6.2	395							
		NORTH CAROLINA	3	5	7787	4.7	368	3	25	8302	391	2	7298	342
		GEORGIA	3	6	7792	4.7	360	3	10	10247	393	2	9453	375
		FLORIDA	1	2	6315	4.5	279	1	19	5560	250	1	7063	314
380662		NEW YORK	1	3	12013	4.2	508	1	2	9840	505	2	9560	456
		NEW JERSEY	1	4	9903	5.0	488							
		OHIO	1	1	7020	4.5	317							
		INDIANA	15	35	8685	4.6	399	13	9	8718	416	2	8987	422
		MICHIGAN	4	5	8881	4.6	403	4	14	9390	411	2	9737	452
		VIRGINIA	4	10	7711	4.8	370	2	5	11979	533	1	9921	427
		NORTH CAROLINA	11	22	7046	4.7	328	10	9	7534	343	2	7884	352
		SOUTH CAROLINA	1	3	7160	4.6	326	1	12	7667	369			
		GEORGIA	8	11	6840	4.3	291	6	14	8568	383	1	6953	289
		FLORIDA	6	15	9088	4.3	391	6	92	9049	407	2	8306	382
		MISSISSIPPI	1	3	8423	4.3	363	1	8	7610	361	2	7331	363
385569		MASSACHUSETTS	2	4	8469	4.9	415	2	14	12249	484	2	12379	497
		NEW JERSEY	3	7	7297	5.0	361	2	3	7737	367	3	7351	318
		INDIANA	6	18	8838	4.8	426	6	4	9696	461	2	9392	451
		MICHIGAN	2	5	6180	5.4	327	1	8	7425	352	2	8320	391
		NORTH CAROLINA	10	20	7189	4.7	338	9	39	8115	358	2	7995	369
		GEORGIA	7	7	5900	4.6	269	7	12	9669	378	1	7903	315

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY		AV. FAT LB.	YEARLY HERD		AV. FAT LB.	
								NO. OAS.	RECORDS NO.		NO. MILK LB.	RECORDS FAT LB.		
		FLORIDA	5	12	8251	4.6	380		5	141	9922	449		
		TENNESSEE	1	1	6660	4.6	306					2	8975	
		MISSISSIPPI	1	3	6457	4.6	295	1	16	7337	360	2	7331	
386975	MASSACHUSETTS	1	1	3540	5.9	209		1	7	7200	360	1	6943	
	NEW YORK	1	1	6800	5.0	337		1	3	7720	371	1	9211	
	NEW JERSEY	1	1	8020	5.0	400		1	25	8750	414	1	9538	
	ILLINOIS	3	6	8565	4.7	404		3	6	12032	443	1	11901	
	MICHIGAN	3	4	9152	5.0	452		3	7	9415	404	2	10533	
	WISCONSIN	9	17	7893	5.0	393		8	13	8560	401	2	8420	
	MISSOURI	2	2	8495	4.8	408		2	8	10625	483	1	9821	
	NEBRASKA	1	1	7330	4.9	361		1	5	7820	393	1	10224	
	GEORGIA	2	3	7635	4.5	344		2	32	9705	400	2	11080	
	CALIFORNIA	1	1	11200	5.3	591		1	6	8900	474			
390340	CONNECTICUT	1	1	12990	5.4	696								
	WASHINGTON	8	14	9456	5.2	494		7	21	10122	485	2	10002	
	OREGON	1	2	8695	5.1	439		1	13	8955	435			
	CALIFORNIA	2	3	7365	5.0	371		1	15	9010	413			
392657	NEW JERSEY	1	1	9540	5.2	494		1	15	9120	433	1	9538	
	MICHIGAN	1	1	10740	4.4	477		1	18	9020	417	1	9156	
	KANSAS	1	1	8460	5.0	422		1	18	10200	410	1	11183	
394072	NEW YORK	2	2	8505	5.4	460		1	39	9030	444	1	9657	
	MICHIGAN	1	1	7960	4.3	340		1	26	8860	410	1	10355	
	IDAHO	3	4	7882	4.7	367		1	4	12585	601	2	9134	
	NEW MEXICO	1	3	11290	5.0	565		1	35	8395	422	1	9123	
	ARIZONA	1	1	9790	4.9	477		1	104	10030	476	1	9799	
	WASHINGTON	17	28	9221	5.0	463		17	14	10037	474	1	10174	
	OREGON	15	25	8127	4.8	384		14	16	10623	464	1	10020	
	CALIFORNIA	7	9	8369	4.8	402		4	7	8306	430			
	397073	MICHIGAN	1	2	8290	4.6	380		1	3	13820	510		
		WISCONSIN	27	38	8983	4.4	397		17	14	9212	425	1	9563
MINNESOTA		13	29	8737	4.7	409		11	9	8490	418	2	9036	
IOWA		1	1	7790	4.7	368		1	15	10770	513	1	10028	
NEBRASKA		1	2	10865	5.1	545								
399674	NEW YORK	13	21	9528	4.8	454		7	23	10257	484	2	9631	
	NEW JERSEY	4	6	6855	4.8	328		1	16	8540	408			
	PENNSYLVANIA	2	6	8073	5.6	452		2	42	8643	425	3	8636	
	FLORIDA	1	4	9455	4.7	442		1	63	8745	391	3	8436	
400062	NEW YORK	2	4	7649	4.2	319								
	PENNSYLVANIA	1	1	5580	5.8	323		1	13	7430	367	1	8066	
	OHIO	1	2	6595	5.1	335		1	6	11255	401	1	12208	
	INDIANA	4	9	9374	4.9	458		4	6	11380	530	2	11127	
	MICHIGAN	2	2	7520	4.5	332		2	10	9790	406	1	10562	
	MISSOURI	1	1	7780	5.1	396		1	6	10880	481	1	9821	
	NORTH CAROLINA	6	13	7067	4.8	340		5	21	9567	397	2	9285	
	GEORGIA	4	6	6183	4.5	275		4	61	8223	324	2	7583	
	FLORIDA	6	11	7589	4.6	344		5	128	9519	430	2	8887	
	400816	WASHINGTON	3	4	8965	4.9	435		3	11	10492	453	1	9701
OREGON		1	1	7120	5.4	386		1	7	9750	439	1	10595	
CALIFORNIA		1	1	7370	5.7	418		1	1	9630	437			
401063	WISCONSIN	32	46	8468	5.1	427		24	12	9327	436	1	9131	
	MINNESOTA	22	35	8039	5.0	401		13	9	8967	424	1	8559	
	NORTH DAKOTA	6	16	7952	5.1	406								
	KANSAS	1	2	4200	5.6	238		1	3	12605	477			
	WASHINGTON	1	5	9916	4.4	435		1	14	10532	446	2	9614	
401129	INDIANA	3	7	8405	5.0	424		2	3	13107	561	3	8189	
	NORTH CAROLINA	3	4	7318	5.1	372		3	17	9163	403	1	8845	
	MISSISSIPPI	1	3	7093	5.3	373		1	13	7465	361	2	7331	
404005	INDIANA	1	3	9100	5.1	469		1	17	9380	452	3	9392	
	ILLINOIS	3	3	7003	4.5	314		3	7	7673	357	1	7605	
	MICHIGAN	1	1	8350	5.1	427		1	3	7980	397	1	9211	
	WISCONSIN	7	7	8321	4.6	366		6	20	8688	408	1	9158	
404934	MISSOURI	1	1	4260	5.0	211		1	3	8740	308	1	10039	
	NEBRASKA	6	9	8408	5.1	429		6	17	9803	475	1	9921	
405565	IDAHO	2	3	7068	4.2	289		2	4	8078	404	2	7739	
	WASHINGTON	11	15	9390	4.8	450		11	8	10129	444	1	10996	
	OREGON	6	7	9445	4.8	453		5	17	10830	466	1	9949	
	CALIFORNIA	1	1	7680	5.4	414								
406975	WISCONSIN	1	1	10260	4.6	477		1	20	8690	402	1	9821	
409846	ILLINOIS	1	1	6170	5.0	311		1	6	8320	367	1	6366	
	MICHIGAN	1	3	8207	5.2	427		1	8	10177	496	2	11140	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY		AV. NO.	RECORDS NO.	MILK LB.	FAT LB.	YEARLY HERD		AV. NO.	RECORDS NO.	MILK LB.	FAT LB.
								DAUS.	NO.					NO.	RECORDS				
		WISCONSIN	3	4	8935	4.7	414	3	11	9423	426	1	9990	466					
		MINNESOTA	2	2	5915	5.0	294	2	13	7025	342	1	7461	363					
412090		NEW YORK	2	2	7605	4.6	345												
		NEW JERSEY	1	2	8740	5.4	465	1	3	6535	303	2	6911	294					
		INDIANA	3	6	8927	4.0	358	2	7	10415	437	2	10277	427					
		NORTH CAROLINA	2	3	8800	4.8	418	1	13	11290	433	1	9320	348					
		GEORGIA	1	1	5230	4.7	244	1	34	12250	447	1	10333	393					
		FLORIDA	1	1	7700	4.1	313	1	57	9300	442	1	8796	421					
413580		WASHINGTON	2	2	8260	4.3	349	2	13	8565	359								
		OREGON	1	1	8900	4.7	423	1	18	9080	436								
413816		VIRGINIA	1	1	6920	5.3	363												
		FLORIDA	1	3	8710	4.7	408	1	136	9800	437	3	9312	428					
416675		NEW JERSEY	2	3	8498	5.1	431	2	15	9118	428	2	9457	429					
		INDIANA	3	4	9460	4.5	421	2	5	9470	400	1	9167	400					
		MICHIGAN	4	7	8404	5.0	417	4	8	9140	418	1	10112	447					
		MISSOURI	1	1	6940	5.0	348	1	9	11280	496	1	9145	408					
		NEBRASKA	1	1	5750	5.4	313	1	12	8460	410	1	10301	492					
		NORTH CAROLINA	1	1	8010	5.1	406	1	35	11190	452	1	9330	407					
418022		WISCONSIN	1	1	7890	4.3	340	1	2	8750	316								
		WASHINGTON	2	2	12410	4.8	597	2	11	9695	407	1	9701	399					
		OREGON	3	3	9337	5.2	477	3	24	10840	463	1	9810	434					
421253		WISCONSIN	20	25	8264	4.9	401	12	7	8890	427	1	8834	415					
		MINNESOTA	11	18	7609	4.8	368	10	10	9027	431	2	8969	420					
421539		NEW YORK	1	1	5030	4.2	212					1	8393	420					
		INDIANA	1	1	9620	4.8	462	1	4	8780	424	1	8535	425					
		ILLINOIS	1	1	10030	4.1	416	1	7	9110	427								
		MICHIGAN	1	1	8490	4.7	396	1	5	6550	344								
		WISCONSIN	12	13	9068	4.4	404	12	21	8896	409	1	9431	440					
422053		IDAHO	1	2	10185	4.6	469	1	4	11200	529	2	9134	424					
		WASHINGTON	5	8	10664	4.8	503	5	14	11184	507	1	11494	514					
		OREGON	6	6	7568	4.7	360	5	19	9430	428	1	9426	418					
422538		NEW JERSEY	1	1	7060	4.1	288												
		OHIO	1	1	11700	4.3	506	1	8	10630	486	1	11652	516					
		ILLINOIS	1	1	8090	3.7	296	1	6	7020	292	1	6366	263					
		MICHIGAN	1	2	9890	4.9	481	1	5	8420	359	1	9211	384					
		WISCONSIN	9	12	8528	4.5	386	5	9	9486	431	2	9711	451					
		MINNESOTA	3	4	10235	4.3	443	3	9	9920	439	2	9238	444					
424536		INDIANA	1	1	8670	4.8	416	1	4	9010	436	1	8535	425					
		MICHIGAN	2	2	9965	5.0	491	2	9	10330	455	1	11500	481					
		WISCONSIN	9	13	8484	4.6	387	9	22	8514	404	1	9420	453					
		MINNESOTA	1	1	3460	5.3	184	1	21	9400	428	1	8382	396					
428158		NEW YORK	2	2	8465	5.1	429												
		PENNSYLVANIA	1	2	4345	5.5	236	1	16	8175	372	2	7527	324					
		INDIANA	4	6	9756	4.6	442	3	7	11197	486	1	11420	466					
		ILLINOIS	1	2	12275	5.1	619	1	19	9805	486	1	10137	521					
		WISCONSIN	6	7	7781	4.9	376	6	23	8546	396	1	8545	404					
		MINNESOTA	1	1	8950	4.8	428	1	7	8950	410	1	8186	387					
		MISSOURI	1	1	8260	4.8	399	1	3	8180	378	1	9320	453					
		NORTH CAROLINA	6	9	7556	4.9	368	6	10	8759	379	2	8677	377					
		FLORIDA	3	4	8498	4.6	388	3	164	9827	440	1	8851	414					
428703		UTAH	1	2	10320	4.4	446												
433930		MASSACHUSETTS	1	1	6990	4.7	332	1	22	10250	388	1	10137	398					
		NEW JERSEY	1	2	6000	5.4	325	1	19	8590	422	2	9800	441					
		PENNSYLVANIA	1	1	8100	5.2	425	1	16	9340	410								
		ILLINOIS	22	33	8431	4.8	402	21	6	9233	441	1	9211	428					
		MICHIGAN	1	2	7870	4.9	388	1	13	10365	421	2	10813	443					
435989		OREGON	2	3	9115	4.7	430												
436380		NEW YORK	3	4	8580	4.9	416	3	31	8867	433	1	9127	446					
		MICHIGAN	2	2	8830	4.8	424	2	11	11135	445	1	11800	490					
		GEORGIA	1	1	6520	4.9	318	1	20	9820	443	1	8469	372					
441206		CALIFORNIA	7	15	11306	5.2	586												
443144		CONNECTICUT	1	2	10160	4.9	494												
		NEW YORK	5	6	6879	5.3	365	4	16	8615	401	1	8934	423					
		MICHIGAN	4	4	9705	4.5	427	4	13	8523	385	1	9367	415					
447971		NEW JERSEY	1	1	8220	4.9	401	1	25	8740	414	1	9538	423					
		INDIANA	3	3	7550	5.0	374	2	7	7915	386	1	7881	379					
		MICHIGAN	5	8	9304	4.9	455	5	14	9325	412	2	10261	464					

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.		
								NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		VIRGINIA	1	1	8470	4.6	388	1	2	12100	481	1	9930	449
		GEORGIA	1	1	5410	4.9	267	1	9	6990	319	1	7052	303
	451597	ILLINOIS	1	1	9680	4.9	474	1	17	9750	473			
		WISCONSIN	6	8	8776	4.5	398	6	20	8513	393	1	8934	416
		MINNESOTA	2	3	7765	5.2	402	2	7	8858	413	1	8186	387
	455056	ILLINOIS	5	5	11456	4.7	542	5	14	9316	460	1	9647	468
		WISCONSIN	23	29	8287	4.9	404	23	13	9303	433	1	9963	457
	457384	NEW YORK	1	1	11830	3.9	464							
		ILLINOIS	1	1	8580	5.5	469	1	21	10200	515	1	10137	521
		MICHIGAN	1	1	10640	4.2	448	1	10	9940	507	1	11423	538
		WISCONSIN	23	24	8136	4.7	380	23	16	8528	408	1	9271	447
		MINNESOTA	1	2	7105	3.8	268	1	19	9940	388	2	8851	361
	460057	CONNECTICUT	1	3	8513	5.2	439							
	464993	NORTH CAROLINA	1	2	6155	4.3	262	1	14	7190	298	2	6758	292
	465262	NEW YORK	4	4	9090	4.7	425	4	16	7940	409	1	8573	427
		MICHIGAN	2	3	6370	5.0	323	2	19	9363	398	2	10584	445
	465971	COLORADO	3	3	10170	4.6	464							
	467224	WASHINGTON	1	1	12650	4.0	511					1	10747	477
		OREGON	1	2	9680	5.6	541							
	472164	INDIANA	1	1	7980	5.0	395	1	1	11900	539			
		ILLINOIS	1	1	9160	4.6	423	1	10	5460	244			
		MICHIGAN	1	1	3070	5.1	156	1	13	8720	371	1	12099	499
		WISCONSIN	5	5	10150	5.0	509	5	18	7594	432	1	10421	470
	487591	NEW JERSEY	1	1	8490	4.8	411	1	25	8730	414	1	9538	423
HOL.	718551	NEW YORK	8	36	12057	3.7	440							
		ILLINOIS	6	17	12211	3.9	466	1	3	12850	466			
		WISCONSIN	30	80	10868	3.7	398	12	15	11388	417	2	11702	430
	723903	NEW YORK	15	26	12470	3.5	442							
		ILLINOIS	6	12	12668	3.9	492	2	3	9651	350	2	12443	455
		WISCONSIN	23	63	11002	3.7	400	13	10	12814	464	2	12962	466
	729720	ILLINOIS	3	11	14510	3.4	498	3	11	12003	449	2	11239	406
		WISCONSIN	17	57	11955	3.6	423	12	8	11936	433	2	12146	441
	733862	NEW YORK	1	1	15970	3.1	500							
		INDIANA	34	103	12788	3.7	463	20	6	12236	456	2	12044	444
		ILLINOIS	2	9	12253	3.5	422	1	21	13392	519	2	13898	506
		MICHIGAN	76	201	12452	3.6	452	16	6	12905	466	1	12782	472
		WISCONSIN	3	6	11612	3.6	420	3	10	11528	433	1	10633	390
		MISSOURI	1	1	10590	3.2	344							
		VIRGINIA	2	6	9667	3.6	349							
		NORTH CAROLINA	5	21	11483	3.6	415	3	7	10452	377	2	8661	330
		GEORGIA	3	9	10983	3.7	400	2	38	10782	402	3	9774	364
	738767	INDIANA	4	6	14105	3.4	470	1	4	14280	515	1	13472	500
	739007	OHIO	1	4	12260	3.5	425							
		INDIANA	2	6	12219	3.4	413	2	4	12548	445	3	12508	439
		ILLINOIS	5	15	12845	3.5	445	1	8	13447	509	5	13799	523
		WISCONSIN	36	98	11534	3.5	396	15	9	12442	449	2	12120	435
		MINNESOTA	1	1	9020	3.6	328							
		IOWA	1	2	10175	3.4	338	1	9	12035	407			
		MARYLAND	1	5	10452	3.8	398	1	6	9378	347	3	9963	374
		NORTH CAROLINA	14	41	9970	3.7	368	4	14	12008	439	3	11035	409
		FLORIDA	2	6	9604	3.8	367							
	748396	INDIANA	1	2	9265	4.4	408							
		ILLINOIS	5	6	13284	4.1	537							
		WISCONSIN	43	114	11584	3.7	428	9	8	12697	456	2	11759	433
		FLORIDA	1	1	12990	3.7	482							
	748994	ILLINOIS	11	34	12046	3.6	438	5	4	13461	487	2	12813	471
		MICHIGAN	4	20	13307	3.6	482	3	11	11745	404	2	11910	441
		WISCONSIN	138	396	11396	3.6	415	76	14	11705	428	2	11303	417
		IOWA	1	4	13558	3.0	413	1	3	10973	407			
		NEBRASKA	1	3	9760	3.8	375							
		KANSAS	1	2	12885	3.6	461							
		VIRGINIA	1	5	7182	3.6	260							
		WEST VIRGINIA	1	11	12609	3.8	480					2	11277	435
		NORTH CAROLINA	2	6	11020	3.9	435	1	4	11680	435	3	11144	444
		KENTUCKY	1	2	7610	3.4	253							
		TEXAS	1	4	16323	3.9	627	1	6	10605	429	3	8844	367

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LBS.	TEST PCT.	FAT LBS.	305-DAY CONTEMPORARY AV.				YEARLY HERO		
								NO. OAUS.	RECORDS NO.	MILK LBS.	FAT LBS.	RECORDS NO.	MILK LBS.	FAT LBS.
		INDIANA	16	35	12734	3.8	479	11	5	12380	452	2	11932	438
		ILLINOIS	17	50	12341	3.8	462	13	10	13109	477	2	12529	462
		MICHIGAN	5	15	14318	4.0	564	5	9	14105	523	3	14285	530
		WISCONSIN	110	268	11902	3.8	449	98	21	11914	441	2	12082	447
		MINNESOTA	6	19	9824	3.5	346	5	8	11391	413	3	10986	392
		KANSAS	1	3	9223	4.0	369	1	2	9763	411			
		VIRGINIA	1	2	6435	4.1	260							
		NORTH CAROLINA	13	37	12164	3.7	450	12	8	12321	437	3	11012	410
		GEORGIA	1	1	13310	3.3	434	1	1	13920	613	1	11249	431
		OKLAHOMA	1	1	9780	3.7	362							
823055		CONNECTICUT	1	7	14267	4.0	572							
		NEW YORK	9	17	11811	3.5	409	1	4	9785	325	3	9984	347
		PENNSYLVANIA	1	5	15654	3.6	556	1	8	12523	505	3	11652	460
		INDIANA	55	103	11000	3.4	373	55	26	11834	395	2	12365	422
		ILLINOIS	29	81	13274	3.6	474	18	8	12486	462	2	11983	444
		MICHIGAN	6	12	12720	3.5	450	5	14	13550	501	2	13108	486
		WISCONSIN	127	333	12051	3.6	433	108	16	11922	437	2	11797	433
		MINNESOTA	11	35	11453	3.6	410	10	7	11590	421	3	11726	428
		IOWA	1	5	13118	3.8	496	1	3	10548	429	1	11249	469
		KANSAS	1	6	13798	3.8	520							
		MARYLAND	1	1	9530	3.3	315							
		VIRGINIA	4	13	13237	3.6	476	1	3	12665	510	2	12818	490
		NORTH CAROLINA	14	38	11402	3.7	416	13	13	10644	395	2	10405	398
		GEORGIA	2	2	8740	4.0	348	2	13	8470	344	1	7766	302
		FLORIDA	1	2	13120	3.9	511							
		ALABAMA	1	3	6037	3.6	216							
		OKLAHOMA	1	4	11210	3.5	391	1	3	12375	421	3	11114	389
826435		NEW YORK	1	2	11060	3.7	407							
		PENNSYLVANIA	1	2	8710	3.9	338	1	9	8670	346	1	8360	340
		INDIANA	3	5	10438	3.5	361	3	6	11625	420	1	10739	376
		ILLINOIS	11	31	12166	3.8	455	8	12	13251	487	2	12893	473
		WISCONSIN	68	203	11221	3.8	424	57	18	11874	435	2	11709	432
		MINNESOTA	3	9	13504	3.5	477	1	6	9514	389	4	10167	380
		MISSOURI	1	5	10050	3.2	325	1	4	9320	329	3	9192	314
		VIRGINIA	1	1	11660	3.6	420							
		NORTH CAROLINA	3	12	12953	3.7	478	2	10	10868	404	3	10134	394
		GEORGIA	1	3	10453	3.6	369							
		FLORIDA	1	1	11840	3.1	364							
826750		NEW YORK	2	6	14100	3.5	498	1	9	12065	455	3	13821	522
		PENNSYLVANIA	1	2	13140	4.0	526	1	5	11440	447	1	10780	409
		INDIANA	3	5	13571	3.8	512	2	8	14605	538	2	13233	478
		ILLINOIS	36	93	12827	3.7	474	30	7	12552	459	2	11936	440
		MICHIGAN	12	20	12039	3.7	442	8	9	11903	443	1	11835	431
		WISCONSIN	163	440	12093	3.7	449	151	21	11821	434	2	11807	435
		MINNESOTA	13	41	11808	3.8	441	12	9	11328	430	3	10919	416
		IOWA	1	1	13660	3.6	497							
		NEBRASKA	1	1	11780	3.5	418	1	1	18580	634	1	13080	464
		VIRGINIA	1	4	14105	3.6	511							
		WEST VIRGINIA	2	6	12779	3.8	484	2	4	10872	379	2	10595	397
		NORTH CAROLINA	8	18	12056	3.8	445	8	17	10685	404	2	11108	421
		GEORGIA	1	6	10818	4.0	429							
		OKLAHOMA	1	1	6470	2.9	189							
		UTAH	1	2	13565	3.6	479	1	10	13885	499	1	13418	497
		OREGON	1	1	11230	3.9	433	1	17	13170	507			
831073		NEW YORK	71	189	13502	3.6	480	14	8	11899	429	2	11820	428
		NEW JERSEY	1	1	10960	3.5	381	1	3	12880	473	1	15663	557
		INDIANA	67	159	13361	3.6	478	57	6	12369	457	2	11964	443
		ILLINOIS	33	59	13493	3.6	489	32	10	12886	474	2	13002	479
		MICHIGAN	32	67	13504	3.6	482	27	10	12134	437	2	12336	454
		WISCONSIN	70	140	12519	3.7	456	65	33	12319	452	2	12138	446
		MINNESOTA	7	12	11870	3.8	444	7	7	11585	423	1	11549	421
		IOWA	5	12	14360	3.5	505	5	9	12212	450	1	12461	462
		MISSOURI	3	8	12095	3.5	427	1	17	9875	358	2	9151	322
		NEBRASKA	1	2	9440	3.7	345	1	11	11400	440	2	11418	437
		KANSAS	3	6	12303	3.7	456							
		VIRGINIA	19	55	13006	3.7	474	1	28	12860	457	2	13584	489
		NORTH CAROLINA	104	253	11665	3.6	419	93	14	10862	398	2	10663	393
		SOUTH CAROLINA	2	4	15117	3.4	487	1	6	9593	355	1	7270	269
		GEORGIA	31	78	10574	3.6	375	19	22	9345	358	2	8876	347
		FLORIDA	7	20	9230	3.8	352	4	57	7830	352	3	7955	353
		TEXAS	1	1	11660	3.4	392	1	63	13240	447			
		MONTANA	1	3	13163	3.7	484	1	6	13380	481			
		WASHINGTON	7	11	11239	3.4	389	7	23	12491	468	2	12887	454
832427		MISSOURI	4	14	11582	3.7	432	3	10	10450	374	4	10018	357
834606		ILLINOIS	3	3	12347	3.4	420							
		MICHIGAN	2	2	13565	3.6	486							
		WISCONSIN	47	107	11184	3.6	400	39	19	11087	437	2	11506	424
		MINNESOTA	1	4	10743	3.4	364	1	9	9713	339	2	9772	347
		WEST VIRGINIA	1	6	12272	3.7	447							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		KENTUCKY	1	2	8720	3.5	301	1	7	12345	418	2	9647	336
		OKLAHOMA	1	1	14010	3.8	534							
	837450	NEW YORK	4	8	13748	3.5	479							
		INDIANA	9	22	11856	3.6	425	8	6	13205	472	2	12326	453
		VIRGINIA	2	7	11284	3.6	404	1	2	11920	502	1	11412	412
		NORTH CAROLINA	25	69	9940	3.7	362	21	14	10776	391	3	10524	363
		GEORGIA	2	4	11994	3.9	461	2	50	10919	392	2	10334	395
		FLORIDA	1	1	9980	4.8	484							
		MISSISSIPPI	1	4	9783	3.8	371	1	10	6875	296	2	6431	278
	841347	INDIANA	6	15	10816	3.8	409	2	6	13270	475	3	11204	423
	841476	PENNSYLVANIA	3	8	11179	3.6	405	3	10	10539	384	3	10642	393
		INDIANA	35	90	11527	3.6	417	16	6	12489	464	3	11955	443
		ILLINOIS	8	19	11445	3.8	425	7	7	13378	483	2	12459	451
		MICHIGAN	2	5	10610	3.5	366	2	12	11397	409	2	11772	406
		WISCONSIN	37	68	10139	3.6	366	34	30	10844	399	2	10754	392
		MINNESOTA	6	15	11886	3.4	408	5	9	10927	401	2	10541	384
		NORTH CAROLINA	1	1	12780	3.6	459	1	10	13080	472	1	14323	502
		GEORGIA	5	8	7359	3.6	262	1	2	10167	396			
		FLORIDA	1	1	9510	3.4	324							
		COLORADO	1	1	10040	3.5	351							
	842876	NEW YORK	3	4	9868	3.5	343							
		NEW JERSEY	1	2	11595	3.3	377							
		PENNSYLVANIA	3	7	10803	3.9	414	3	9	10854	404	2	10051	376
		INDIANA	49	122	13384	3.5	468	33	6	12680	463	2	12158	447
		ILLINOIS	82	211	13685	3.6	489	76	12	12725	465	2	12298	449
		MICHIGAN	18	30	13446	3.7	492	18	7	12687	473	2	12617	477
		WISCONSIN	231	542	12750	3.6	457	218	20	11824	435	2	11949	438
		MINNESOTA	25	55	11768	3.7	426	23	11	11381	414	2	11655	427
		IOWA	23	51	13786	3.6	494	22	8	12445	455	2	12461	452
		MISSOURI	36	66	11824	3.6	423	31	13	11334	422	2	11031	413
		NORTH DAKOTA	2	2	9560	3.5	337	1	14	7680	272	1	9374	323
		NEBRASKA	15	28	12710	3.7	473	13	7	11259	422	2	11429	421
		KANSAS	22	29	13699	3.6	489	5	14	12527	457	1	12377	446
		VIRGINIA	9	27	12489	3.5	440	2	21	14047	567	2	13950	522
		NORTH CAROLINA	18	49	12843	3.6	458	15	15	11111	402	2	10533	395
		SOUTH CAROLINA	1	4	17728	3.4	613	1	6	14258	473	1	13647	457
		GEORGIA	4	7	8179	3.6	297	3	8	9549	332	2	7892	285
		FLORIDA	2	6	8464	3.9	318							
		ALABAMA	1	5	15906	3.1	493							
		ARKANSAS	1	1	3430	3.3	113	1	6	4080	178			
		LOUISIANA	1	6	11377	3.4	389	1	15	8968	317	4	8987	317
		TEXAS	1	5	12424	3.7	461	1	7	10494	431	3	8844	367
		WASHINGTON	15	40	16127	3.5	565	14	17	14236	510	2	13860	503
		OREGON	2	4	10988	3.5	382	1	8	11280	396	1	11445	408
	843870	IDAHO	2	4	13967	3.8	526	2	15	13607	506	2	12639	458
		COLORADO	1	2	12860	3.3	428	1	8	13205	510			
		UTAH	2	5	11065	3.7	400	1	2	14585	505			
		WASHINGTON	5	6	13855	3.6	504	5	29	14336	517	1	14766	546
		OREGON	5	9	14272	3.7	527	5	13	12693	499	1	12731	497
		CALIFORNIA	1	2	12730	3.7	474	1	20	12960	468			
	844122	MASSACHUSETTS	2	4	11552	4.2	488	2	15	12587	492	2	11334	469
		NEW YORK	33	49	13131	3.8	501	15	16	13035	485	2	12772	472
		NEW JERSEY	5	9	12221	3.8	452	4	9	12310	460	2	11695	431
		OHIO	6	9	12593	3.7	460	6	13	12710	473	2	13011	472
		INDIANA	20	42	12021	3.9	471	19	7	12504	454	2	12205	447
		ILLINOIS	33	86	12953	3.8	485	32	15	12680	474	2	12455	458
		MICHIGAN	15	30	12742	3.8	484	15	12	12167	454	2	12983	481
		WISCONSIN	128	250	12315	3.8	471	117	21	12238	453	2	12121	446
		MINNESOTA	25	59	11836	3.8	453	23	13	12492	460	2	11337	442
		IOWA	9	24	11660	3.8	441	9	9	12098	428	2	11544	417
		MISSOURI	3	7	10791	3.6	388	3	10	10690	386	2	10753	389
		SOUTH DAKOTA	1	1	9630	3.7	354	1	17	10000	348	1	9908	348
		NEBRASKA	34	87	11722	3.9	457	13	6	11302	418	2	11381	419
		KANSAS	8	18	11032	3.8	415	1	2	9397	364	1	14083	471
		MARYLAND	6	9	13976	4.7	649	5	36	12269	522	1	11942	533
		VIRGINIA	8	12	12147	3.9	470	2	26	13615	530	2	13990	542
		NORTH CAROLINA	24	42	11559	3.8	436	24	15	11316	427	2	10647	402
		GEORGIA	16	29	10627	4.0	415	15	21	9885	386	1	9693	376
		KENTUCKY	2	3	12915	3.6	457	2	9	12578	468	1	10715	384
		TEXAS	2	4	12405	3.9	483	2	16	12427	492	2	13574	495
		WASHINGTON	7	18	15719	3.7	580	7	35	14776	547	2	14967	548
	846979	VERMONT	3	3	11033	3.8	416	3	9	12933	479	1	11867	438
		MASSACHUSETTS	2	3	9905	4.2	408	2	16	12028	497	2	11579	468
		NEW YORK	92	112	11868	3.7	433	59	17	12762	471	1	12715	463
		NEW JERSEY	8	10	12146	3.7	449	7	9	12021	451	1	11886	458
		PENNSYLVANIA	4	7	11451	3.7	426	4	9	11255	408	2	11518	426
		OHIO	14	33	11733	3.5	410	14	13	13122	464	2	12785	460
		INDIANA	53	74	12017	3.7	438	47	9	12520	471	1	12439	459

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD		
								NO. OALCS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		ILLINOIS	64	118	12129	3.5	429	64	11	12870	467	2	12432	448
		MICHIGAN	29	46	11849	3.7	438	28	11	12032	449	1	12721	482
		WISCONSIN	175	354	11399	3.6	411	167	28	12095	444	2	11993	441
		MINNESOTA	22	43	10084	3.8	377	22	9	11493	422	2	11388	420
		IOWA	12	37	11357	3.7	422	12	7	11736	426	3	11626	423
		MISSOURI	13	21	11611	3.7	429	11	10	11809	445	2	9887	395
		NEBRASKA	7	14	11147	3.8	417	7	11	11447	446	2	12485	479
		KANSAS	3	3	12150	3.6	434	1	16	12360	471	1	12034	448
		MARYLAND	6	9	12066	4.5	542	6	34	12688	572	2	12061	568
		VIRGINIA	12	15	11838	3.8	454	7	43	12102	455	1	13542	504
		WEST VIRGINIA	1	1	8620	3.4	291	1	14	10330	392	1	10508	396
		NORTH CAROLINA	66	93	10760	3.6	387	60	30	10841	399	1	10868	405
		GEORGIA	19	22	10854	3.8	410	19	36	10202	397	1	10147	399
		FLORIDA	1	1	13210	3.6	482	1	65	12450	452	1	11565	473
		TEXAS	3	8	12387	3.6	437	2	8	12891	465	3	11344	464
		WASHINGTON	8	17	15365	3.4	521	8	20	13999	501	2	14122	503
B50298		MASSACHUSETTS	1	3	11397	3.6	425	1	10	11657	449	2	11979	450
		NEW YORK	40	70	12793	3.8	485	15	20	11982	461	2	12590	477
		NEW JERSEY	2	4	13360	3.5	466	1	7	14615	539	2	14089	519
		PENNSYLVANIA	1	1	10740	3.7	402	1	2	12100	438			
		OHIO	14	27	13368	3.7	486	13	8	14011	494	2	12914	462
		INDIANA	39	83	12628	3.8	479	37	7	12206	449	2	12165	444
		ILLINOIS	43	97	12706	3.7	472	37	11	12615	461	2	12216	444
		MICHIGAN	21	53	12755	3.7	463	20	12	12099	439	2	12207	450
		WISCONSIN	183	423	11894	3.8	447	171	23	11744	430	2	11531	421
		MINNESOTA	29	67	11910	3.8	452	26	9	11402	427	2	11176	433
		IOWA	12	19	13028	3.7	483	11	9	12328	459	1	11860	446
		MISSOURI	1	2	8355	3.6	294							
		NORTH DAKOTA	1	2	11635	4.4	514	1	3	13445	478	2	12252	455
		NEBRASKA	3	6	11329	3.8	419	2	8	14317	519	4	11938	452
		KANSAS	1	3	11993	3.6	431							
		MARYLAND	1	1	14370	4.6	663	1	50	12020	554	1	11816	560
		VIRGINIA	7	16	11605	3.8	434	3	44	13175	459	2	13116	477
		WEST VIRGINIA	3	10	10462	3.9	406	1	6	11020	414	2	10911	421
		NORTH CAROLINA	36	76	11454	3.7	425	36	19	10708	401	2	10447	390
		GEORGIA	18	44	10200	3.9	397	17	20	9116	360	2	8368	333
		FLORIDA	2	3	11560	4.1	471	2	40	10103	469	2	10538	475
		TENNESSEE	1	5	9572	3.2	302							
		TEXAS	1	1	12880	3.6	470							
		IDAHO	17	25	13417	3.7	495	17	8	13837	505	1	13331	488
		COLORADO	1	1	14270	3.7	530	1	12	14690	541			
		ARIZONA	1	2	11475	4.8	548	1	12	15620	593	1	12546	474
		UTAH	8	15	13058	3.7	477	8	13	13666	490	1	14432	525
		WASHINGTON	28	42	14220	3.7	534	27	24	13525	503	1	13156	504
		OREGON	12	18	12739	3.7	472	12	14	12074	466	1	10985	447
		CALIFORNIA	2	3	12763	4.0	507	2	56	15470	571			
B54053		INDIANA	2	6	12457	3.5	435	2	14	12174	450	3	11744	434
		VIRGINIA	5	13	10071	3.8	384	1	43	14100	536	2	11481	444
		NORTH CAROLINA	13	32	9478	3.7	349	10	11	10635	382	2	10568	391
		GEORGIA	1	1	7330	4.7	343							
B54723		NEW YORK	47	111	12032	3.7	440	9	12	11945	433	2	11964	445
		NEW JERSEY	1	5	14114	3.7	520	1	1	15256	541	4	14255	509
		PENNSYLVANIA	1	3	9370	3.8	358	1	12	10960	415	3	10948	402
		INDIANA	51	100	12908	3.6	459	42	6	12820	471	2	12300	455
		ILLINOIS	38	69	12472	3.6	446	37	13	12688	463	2	12463	450
		MICHIGAN	25	60	12132	3.6	432	22	8	12784	466	2	13148	477
		WISCONSIN	78	146	12342	3.6	444	74	22	12152	444	2	12406	456
		MINNESOTA	3	4	13375	3.3	444	3	12	11485	409	2	11901	441
		IOWA	9	19	10686	3.6	388	9	6	12497	454	2	12251	445
		MISSOURI	2	2	13935	3.5	471	1	5	14440	583	1	11047	421
		NEBRASKA	2	4	10683	3.7	387	2	7	10600	389	2	10859	416
		KANSAS	3	10	14442	3.5	506							
		VIRGINIA	4	11	10344	3.5	367	1	13	9130	340			
		NORTH CAROLINA	59	152	10960	3.6	393	52	12	10603	388	2	10237	382
		GEORGIA	14	34	9638	3.6	349	12	12	9678	362	2	8787	329
		ALABAMA	2	2	8025	3.4	284	1	3	4130	176			
		MISSISSIPPI	1	3	11007	3.0	334	1	9	6487	290			
		WASHINGTON	1	1	20180	3.4	682	1	25	12920	632			
		CALIFORNIA	1	1	14180	4.3	610							
B57489		NEW YORK	1	4	15203	3.7	563							
		NEW JERSEY	1	1	14090	3.7	518							
		INDIANA	1	3	10467	3.7	389	1	3	13583	482	1	13298	460
		MICHIGAN	1	4	10253	3.6	371	1	12	12498	452	2	14372	515
B59238		NEW YORK	2	3	12270	3.4	402							
		NEW JERSEY	1	1	9140	3.2	288	1	1	10590	366	1	11303	399
		INDIANA	17	36	12409	3.6	450	12	8	12459	471	2	11458	434
		ILLINOIS	10	18	12896	3.6	457	10	14	13081	484	2	12032	438
		MICHIGAN	1	1	8290	4.1	338	1	1	10660	473	1	9341	428
		WISCONSIN	62	115	11421	3.6	405	60	20	11661	428	2	11776	431
		MINNESOTA	6	15	10441	3.7	380	6	7	10394	384	3	10368	394

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.			
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	
		IOWA	2	5	13907	3.6	493	2	10	13933	500	2	12560	458	
		MISSOURI	2	6	11887	3.8	444	2	4	11494	448	3	10175	406	
		NORTH OAKOTA	1	1	12640	3.2	408	1	21	11140	386	1	12404	443	
		NEBRASKA	3	5	11953	3.6	437	3	8	11493	435	2	11129	417	
		KANSAS	2	5	12627	3.7	468								
		VIRGINIA	6	10	10411	3.6	372								
		NORTH CAROLINA	37	121	10569	3.5	367	27	12	11467	413	3	10976	397	
		SOUTH CAROLINA	1	1	8060	3.6	286	1	5	9450	341	1	7270	269	
		GEORGIA	6	13	7750	3.8	299	6	9	8265	324	2	7367	288	
		FLORIDA	4	16	10676	3.8	400	2	36	10249	456	3	9726	432	
		MONTANA	2	7	11360	4.0	451	2	6	13578	482				
		WASHINGTON	4	10	14024	3.7	511	4	25	15177	533	2	14375	514	
	859649	WASHINGTON	1	1	12420	3.9	490	1	27	16150	559	1	16753	583	
	863100	NEW YORK	28	58	13036	3.7	478	7	7	13532	495	2	13092	480	
		OHIO	1	1	9810	3.8	376	1	7	12530	453	1	11282	433	
		INDIANA	17	36	11551	3.7	420	16	4	12363	440	2	11884	428	
		MICHIGAN	2	7	11306	3.4	379	2	8	11044	405	3	10746	390	
		VIRGINIA	8	13	10649	3.6	384	1	46	10060	371	1	10268	374	
		NORTH CAROLINA	39	92	10107	3.6	360	36	12	10282	380	2	10060	374	
		GEORGIA	23	49	10268	3.7	371	13	17	10606	396	2	10012	380	
		FLORIDA	2	6	10435	4.2	428	1	17	9010	432	2	8927	427	
	864818	MASSACHUSETTS	1	1	13870	3.8	521	1	3	14210	513	1	14214	526	
		NEW YORK	43	84	12115	3.7	451	12	16	13683	516	2	13620	514	
		NEW JERSEY	1	1	11000	3.9	434								
		PENNSYLVANIA	1	4	12335	3.6	447	1	10	12350	429	4	12323	437	
		OHIO	8	20	12186	3.7	450	6	12	12241	438	3	12624	455	
		INDIANA	32	73	12353	3.7	457	32	6	12652	466	2	12318	452	
		ILLINOIS	80	221	12169	3.7	443	72	10	12583	462	3	12312	450	
		MICHIGAN	32	73	11481	3.7	421	28	9	12463	458	2	12402	457	
		WISCONSIN	261	620	11309	3.7	414	237	25	11813	435	2	11648	429	
		MINNESOTA	24	58	10078	3.6	364	20	10	10839	396	2	11093	401	
		IOWA	10	25	11688	3.6	415	8	9	13203	486	3	12977	471	
		MISSOURI	2	2	8735	3.3	290	1	17	9260	310	1	10192	341	
		NORTH OAKOTA	3	6	7802	3.6	280	2	11	8870	317	2	8966	317	
		NEBRASKA	5	9	12375	3.9	477	4	9	12366	454	2	12887	474	
		KANSAS	6	17	11402	3.6	413	1	3	15222	547	2	12650	468	
		MARYLAND	2	4	10578	4.3	444	2	39	11483	507	2	10023	448	
		VIRGINIA	7	11	11565	3.7	411	2	27	12038	450	2	11986	433	
		NORTH CAROLINA	49	120	10408	3.7	379	46	13	10932	401	2	10241	379	
		GEORGIA	8	14	9237	3.7	344	7	14	8000	317	2	8563	339	
		FLORIDA	2	5	10021	3.9	381	2	40	8766	395	3	8465	379	
		KENTUCKY	1	9	15168	3.6	538	1	44	13650	476	7	12519	439	
		TENNESSEE	1	3	9513	3.7	350								
		TEXAS	2	5	11816	3.9	446	2	7	13030	461	1	9886	380	
		WASHINGTON	4	12	12382	3.8	472	3	17	14581	524	2	13041	475	
		OREGON	2	2	9180	3.5	318	2	11	12710	431	1	12911	474	
	865325	VERMONT	1	1	6000	3.8	230	1	29	6320	232	1	7990	294	
		NEW YORK	50	107	12203	3.6	439	15	10	11939	438	2	11928	436	
		PENNSYLVANIA	2	3	11715	3.9	453	2	13	10173	402	2	10508	472	
		OHIO	7	15	13188	3.5	465	7	11	12597	447	2	12837	462	
		INDIANA	53	100	12994	3.6	469	50	7	12863	467	2	12312	451	
		ILLINOIS	50	95	13420	3.7	489	49	16	13157	486	2	12809	469	
		MICHIGAN	16	30	12956	3.7	471	16	10	11858	441	2	12410	454	
		WISCONSIN	68	105	12467	3.8	468	61	34	12527	459	1	12294	453	
		IOWA	11	17	12679	3.6	454	11	12	12642	457	2	12545	449	
		MARYLAND	1	3	16097	3.6	577	1	44	9477	368	3	9432	376	
		VIRGINIA	12	27	13627	3.6	498	7	22	13037	489	2	12119	451	
		NORTH CAROLINA	79	171	10727	3.6	383	72	14	10631	389	2	10412	384	
		GEORGIA	24	46	10316	3.6	369	22	24	9318	361	2	9208	353	
		FLORIDA	3	9	10489	3.9	407	2	36	8969	396	3	8364	369	
		ALABAMA	1	1	7670	3.4	260								
		MISSISSIPPI	2	8	11622	3.5	399	2	15	8539	330	2	9096	351	
		TEXAS	1	1	17150	3.4	578	1	2	17550	578	1	12677	432	
		MONTANA	1	1	11420	3.1	358	1	12	9980	343	1	10202	341	
	866063	NEW YORK	13	34	11797	3.7	434	1	14	14170	529	2	14770	530	
		NEW JERSEY	1	2	12080	3.6	428								
		OHIO	1	1	7460	4.2	315								
		INDIANA	5	14	11672	3.7	433	5	5	12771	479	3	11698	432	
		ILLINOIS	25	69	11818	3.6	422	16	8	12582	456	2	12117	444	
		MICHIGAN	6	17	9783	3.5	332	5	22	12141	442	3	12035	444	
		WISCONSIN	193	533	11087	3.6	402	137	18	11809	431	2	11653	425	
		MINNESOTA	7	18	9975	3.5	350	7	6	9726	364	1	9865	351	
		IOWA	1	4	9255	3.7	343	1	7	9023	337	3	9668	368	
		VIRGINIA	3	5	9316	3.8	354	1	10	9770	332				
		WEST VIRGINIA	1	1	8100	3.7	300								
		NORTH CAROLINA	17	48	10222	3.5	359	15	11	9912	362	3	9681	360	
		GEORGIA	3	9	10930	3.7	404	2	10	8264	312	2	8546	318	
		FLORIDA	2	6	9069	3.7	341	1	21	6817	306	3	6863	305	
		TENNESSEE	1	1	12460	3.7	462								
		LOUISIANA	1	1	8260	3.5	287								

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LBS.	TEST PCT.	FAT LBS.	305-DAY CONTEMPORARY				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LBS.	FAT LBS.	RECORDS NO.	MILK LBS.	FAT LBS.
		COLORADO	1	1	10610	3.6	379							
866277		INDIANA	1	2	11560	3.5	397	1	3	10940	396	1	11020	384
870736		NEW YORK	97	206	12198	3.8	465	9	11	13704	513	2	13150	484
		NEW JERSEY	3	5	14441	3.7	527	1	2	12030	414	3	13033	479
		PENNSYLVANIA	2	2	9435	3.8	353	2	6	9465	328			
		OHIO	9	11	10113	3.4	340	8	10	11878	409	1	11904	409
		INDIANA	68	138	11648	3.8	438	60	8	12311	451	2	12072	446
		ILLINOIS	34	80	12049	3.8	454	32	9	12585	454	2	12186	447
		MICHIGAN	33	60	12928	3.8	483	29	12	12541	465	2	12746	474
		WISCONSIN	144	341	11563	3.8	432	125	19	12257	447	2	11779	433
		MINNESOTA	10	27	9953	3.8	369	10	18	9885	364	2	9817	366
		IOWA	1	1	14630	3.6	530	1	6	14720	548	1	12622	486
		MISSOURI	1	2	9885	3.5	346	1	17	11690	406	1	9930	341
		NEBRASKA	1	2	15310	4.0	601	1	3	12505	492	2	11227	400
		MARYLAND	1	1	10670	3.2	344							
		VIRGINIA	9	18	12674	3.7	466	4	16	10103	383	2	10300	392
		NORTH CAROLINA	39	81	10117	3.8	382	39	15	10300	383	2	10321	381
		SOUTH CAROLINA	1	3	16060	3.3	537	1	9	14890	513	1	13647	457
		GEORGIA	11	18	10284	3.9	393	9	18	10072	398	2	9199	369
		FLORIDA	2	3	10790	3.7	401	2	45	8615	385	2	8243	363
		TENNESSEE	1	1	13500	3.5	469							
		IDAHO	2	2	11610	3.6	416	2	6	13305	488	1	12813	471
		WASHINGTON	11	19	13260	3.7	492	11	19	14196	519	1	13509	499
		OREGON	3	6	12324	4.2	520	3	13	10695	452	1	10455	452
		CALIFORNIA	1	1	13980	3.7	518							
878520		NEW YORK	4	8	12164	3.5	427							
		MICHIGAN	2	2	11005	3.7	403	2	6	11190	410	1	11113	394
		WISCONSIN	22	33	12976	3.6	460	18	9	12037	459	1	12234	464
		MINNESOTA	25	50	11811	3.6	420	25	11	11986	438	2	11823	429
		IOWA	2	4	10945	3.6	389	2	8	15600	544	2	11936	427
		NEBRASKA	1	1	12300	3.9	484	1	8	11550	436	1	11848	419
		KANSAS	1	2	8305	4.0	330							
		WASHINGTON	2	4	11708	4.0	458	2	16	12898	510	2	12996	490
878665		MASSACHUSETTS	1	1	11760	3.7	432	1	18	14500	518			
		NEW YORK	1	1	14450	3.6	525							
		PENNSYLVANIA	3	15	10310	3.8	389	3	5	9737	370	4	9386	355
		INDIANA	2	2	10895	3.6	395	1	2	9710	370	1	9134	330
		ILLINOIS	57	160	12575	3.6	456	55	12	12678	470	2	12712	461
		MICHIGAN	8	23	10271	3.5	364	8	13	12387	447	2	12633	469
		WISCONSIN	247	497	11944	3.7	437	226	19	12317	454	2	12145	448
		MINNESOTA	44	99	11984	3.6	428	43	13	12198	440	2	12457	448
		IOWA	13	35	12917	3.6	458	11	11	13741	483	2	12916	457
		MISSOURI	3	7	13297	4.0	525	3	21	12623	490	2	10238	449
		NEBRASKA	5	9	11603	3.5	408	4	6	11189	408	2	11560	412
		KANSAS	3	9	11975	3.8	450							
		WEST VIRGINIA	1	3	10580	3.6	362	1	1	7930	372			
		TEXAS	2	5	10988	3.7	402	2	12	11849	457	2	11734	453
		WASHINGTON	7	8	14314	3.5	506	7	19	13401	494	1	14349	524
880210		NEW YORK	76	135	12005	3.9	459	27	17	13007	476	2	12880	469
		NEW JERSEY	2	4	10065	3.8	376							
		PENNSYLVANIA	3	11	9857	3.7	365	3	11	9093	363	3	8560	367
		OHIO	18	29	12233	3.6	441	14	12	13225	461	2	12771	449
		INDIANA	59	122	12433	3.8	473	53	9	12749	471	2	12532	462
		ILLINOIS	61	170	11754	3.8	446	55	9	12636	465	3	12304	455
		MICHIGAN	41	70	11907	4.0	471	39	10	12579	469	1	13226	493
		WISCONSIN	191	474	11102	3.9	426	184	21	11927	437	2	11747	429
		MINNESOTA	16	33	11765	3.7	439	13	9	12017	438	2	11756	421
		IOWA	11	28	10525	3.7	390	10	12	12454	437	2	11302	414
		MISSOURI	10	19	10083	3.8	378	9	16	11076	416	2	10558	394
		SOUTH DAKOTA	1	3	12193	4.1	503	1	5	9527	385	1	8840	373
		NEBRASKA	5	11	12849	3.8	493	4	8	10400	397	2	11595	429
		KANSAS	3	4	9890	3.8	379							
		VIRGINIA	16	24	11484	3.8	438	9	22	12090	444	1	12187	455
		NORTH CAROLINA	51	96	10410	3.8	395	49	12	10407	392	2	10119	381
		GEORGIA	24	50	9747	3.6	370	24	28	9405	364	2	9669	368
		FLORIDA	5	11	11820	4.0	475	5	45	10679	437	2	9863	419
		TENNESSEE	1	2	11530	3.4	388							
		MISSISSIPPI	1	2	10000	3.7	367	1	13	7360	324	1	6823	292
		OKLAHOMA	2	8	13432	4.0	522	2	13	13742	471	4	10254	389
		TEXAS	1	6	14647	3.5	509	1	4	13076	485	2	11658	435
		ARIZONA	2	2	14460	3.6	521	2	76	11985	428	1	13527	482
		UTAH	2	2	12310	3.9	482	2	14	14020	534			
		WASHINGTON	2	7	12117	3.9	472	2	20	13348	507	1	14508	579
890181		MASSACHUSETTS	3	5	13245	4.3	568	3	15	11918	472	2	12319	479
		CONNECTICUT	4	4	12138	4.2	510	4	14	13975	534	1	14697	568
		NEW YORK	88	113	12350	4.0	490	78	23	13045	484	1	13444	496
		NEW JERSEY	17	25	11134	4.0	435	17	37	12179	445	1	12076	447
		PENNSYLVANIA	20	27	10277	4.2	426	20	20	11583	434	1	12275	456
		OHIO	14	17	11700	4.0	467	13	11	12559	456	1	12035	439

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.			
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	
		INDIANA	36	45	12789	4.0	509	32	13	13419	498	1	13118	491	
		ILLINOIS	3	3	14133	3.8	532	3	10	12390	473	1	12274	465	
		MICHIGAN	42	62	11334	3.9	443	42	14	12093	461	1	12378	474	
		WISCONSIN	79	120	11892	3.9	465	60	9	12413	467	1	12085	452	
		MINNESOTA	58	101	11361	3.9	441	58	16	12452	456	2	11995	449	
		IOWA	5	17	13876	3.8	513	5	7	13600	497	3	11730	479	
		MISSOURI	16	26	11741	3.9	454	14	23	13154	477	2	11712	463	
		NEBRASKA	4	8	11790	3.9	449	4	10	11521	430	2	11780	442	
		KANSAS	10	11	12864	3.9	505	5	22	12818	475	1	11192	437	
		MARYLAND	1	1	11120	3.8	426	1	19	11720	420	1	8916	329	
		VIRGINIA	13	15	11123	3.9	431	10	26	11666	434	1	11453	431	
		NORTH CAROLINA	35	42	10591	3.9	409	34	29	10921	400	1	11044	408	
		GEORGIA	8	11	12195	3.9	472	8	45	10679	420	1	10655	423	
		FLORIDA	2	2	9340	4.6	426	1	97	11880	461	1	11565	473	
		KENTUCKY	1	1	14420	3.8	554	1	22	12400	447	1	12840	450	
		ALABAMA	1	1	13830	3.9	540	1	4	16130	571	1	12546	471	
		OKLAHOMA	2	2	14030	3.6	510	2	13	15610	563	1	18465	641	
		WASHINGTON	1	2	14270	3.3	462	1	27	13830	500	2	14655	518	
890463		NEW YORK	53	109	13258	3.6	471	21	9	13251	490	2	12496	457	
		NEW JERSEY	3	4	9587	3.8	366	2	12	12745	468	2	11069	413	
		PENNSYLVANIA	1	1	15740	3.7	587	1	30	10150	381	1	10813	405	
		OHIO	13	26	11367	3.6	405	12	13	12115	430	2	12944	455	
		INDIANA	48	93	12578	3.6	449	45	7	11990	439	2	12304	443	
		ILLINOIS	34	63	12271	3.6	439	34	12	12984	477	2	12373	449	
		MICHIGAN	14	23	12499	3.6	456	13	10	12664	451	1	13259	504	
		WISCONSIN	51	73	12693	3.5	439	43	32	12510	457	1	12540	464	
		MINNESOTA	1	1	16820	3.5	591	1	18	12920	457	1	9527	385	
		IOWA	14	26	12088	3.6	432	14	14	12728	464	2	11691	414	
		KANSAS	2	5	10138	3.9	389								
		MARYLAND	6	13	12457	4.3	539	6	35	12505	557	2	11622	542	
		VIRGINIA	13	26	12410	3.6	438	2	11	12230	461	1	9777	400	
		NORTH CAROLINA	108	256	10782	3.5	376	103	13	10797	398	2	10659	397	
		GEORGIA	22	50	11097	3.6	403	21	23	10172	395	2	9242	358	
		FLORIDA	3	6	9631	3.9	374	2	37	7835	357	1	8241	371	
		MISSISSIPPI	1	2	11785	3.5	416	1	7	10905	393				
		ARIZONA	1	1	11200	3.8	428	1	100	12100	431	1	13527	482	
891850		NEW YORK	1	1	11280	3.4	378								
		ILLINOIS	17	39	12237	3.7	445	17	12	12765	465	2	12470	455	
		MICHIGAN	2	12	12902	3.7	479	2	7	14058	512	5	13093	479	
		WISCONSIN	31	65	11793	3.8	444	30	16	11506	428	2	11603	433	
		MINNESOTA	3	9	11398	3.8	440	3	11	10739	382	3	10702	372	
		IOWA	3	8	11508	3.7	434	3	5	13166	498	3	11756	457	
		MISSOURI	1	5	11766	3.6	422	1	4	10180	368	3	10722	386	
		NEBRASKA	1	1	10160	3.7	375	1	4	10560	370	1	7586	256	
900274		VERMONT	1	1	9530	4.2	404	1	14	10500	396	1	10726	388	
		MASSACHUSETTS	4	6	11314	4.0	453	4	24	11191	435	2	10800	419	
		CONNECTICUT	1	1	14370	4.3	615	1	22	14720	561	1	16143	632	
		NEW YORK	50	60	12632	3.8	478	44	21	12663	467	1	13075	485	
		NEW JERSEY	9	11	12044	3.7	449	9	11	12303	450	1	11615	432	
		PENNSYLVANIA	7	9	12369	3.8	471	6	17	11207	408	1	11685	428	
		OHIO	12	16	11084	3.7	403	12	11	12414	440	1	12408	448	
		INDIANA	28	38	12997	3.8	496	26	11	13395	495	1	13005	476	
		ILLINOIS	13	17	13504	3.8	507	10	19	12910	468	1	12582	457	
		MICHIGAN	23	35	12697	3.9	497	22	13	12600	465	1	12432	460	
		WISCONSIN	26	33	12786	3.9	490	26	11	12563	466	1	12878	481	
		MINNESOTA	14	21	13515	3.8	515	14	12	12638	463	1	12229	448	
		IOWA	7	16	13187	3.9	511	6	10	13133	483	2	11661	453	
		MISSOURI	50	98	12242	3.8	470	50	16	12321	458	2	11920	452	
		NEBRASKA	15	30	13059	3.9	506	13	11	11905	440	2	12140	455	
		KANSAS	37	53	11483	3.9	445	6	18	12272	453	1	11419	429	
		MARYLAND	3	5	12110	4.5	551	2	41	12435	556	2	12149	565	
		VIRGINIA	10	12	11064	3.9	425	5	45	12259	454	2	11154	419	
		WEST VIRGINIA	1	1	13180	3.6	471	1	37	11030	404	1	9025	336	
		NORTH CAROLINA	23	31	10712	3.8	403	22	18	11125	412	1	10904	406	
		GEORGIA	9	11	10054	3.5	356	8	70	9702	368	1	9998	388	
		FLORIDA	2	2	11645	3.9	443	2	100	10835	457	1	10448	451	
		KENTUCKY	1	1	7370	4.3	317	1	7	11940	468				
		ALABAMA	1	1	7500	3.6	273								
		OKLAHOMA	7	12	14341	4.0	573	7	10	14694	517	1	13372	490	
		COLORADO	1	2	14845	3.7	542	1	36	13910	478	1	13527	468	
904220		MASSACHUSETTS	3	3	13840	3.7	523	2	11	10270	414	1	10072	407	
		NEW YORK	78	108	12512	3.7	462	44	15	13076	480	1	13034	482	
		NEW JERSEY	1	1	12170	3.8	466	1	23	12820	482	1	13178	494	
		PENNSYLVANIA	1	1	18710	3.4	643	1	12	15560	606	1	15107	549	
		OHIO	28	54	12764	3.6	456	28	10	12870	454	2	12822	459	
		INDIANA	80	132	12893	3.7	479	73	9	12666	471	2	12441	457	
		ILLINOIS	28	36	12703	3.7	470	23	12	13000	473	1	12793	466	
		MICHIGAN	42	71	13122	3.7	481	41	14	12403	455	1	12642	465	
		WISCONSIN	67	89	12568	3.8	471	65	17	13228	494	1	13111	486	
		MINNESOTA	17	24	12786	3.8	481	17	18	12256	454	1	11436	457	
		IOWA	2	2	9635	3.5	339	2	9	10420	354	1	11140	391	

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NC.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		MISSOURI	1	2	10220	3.8	389	1	2	13320	561	1	12720	483
		NEBRASKA	2	3	13743	3.2	430	2	3	15163	531	1	12557	446
		MARYLAND	10	17	12980	4.5	581	10	42	11932	550	2	11767	565
		VIRGINIA	11	19	13156	3.7	489	7	19	13169	507	1	12878	482
		NORTH CAROLINA	57	90	10950	3.7	403	53	23	10614	397	1	10682	395
		GEORGIA	18	35	11939	3.7	436	18	32	10413	397	2	9693	372
		FLORIDA	3	6	11003	3.6	393	3	90	7742	348	2	7687	347
		KENTUCKY	1	2	9855	3.9	377	1	9	9180	360	1	10028	414
		IDAHO	4	4	15248	3.7	562	4	12	14720	515	1	14788	525
		COLORADO	1	1	13290	3.4	446	1	57	14190	508	1	10606	363
		UTAH	4	4	13963	3.8	523	4	19	12498	453			
		WASHINGTON	5	7	13542	3.8	516	5	32	13927	528	2	13681	514
		OREGON	1	1	14340	4.7	680	1	12	16540	590			
910630		MASSACHUSETTS	1	1	14030	3.8	531	1	11	16710	632	1	14661	569
		NEW JERSEY	1	1	16870	3.3	557	1	39	11510	419	1	11979	435
		PENNSYLVANIA	4	5	9708	4.1	396	4	10	9270	347	1	10951	417
		ILLINOIS	32	49	13054	3.8	493	32	12	13019	481	1	12650	469
		MICHIGAN	5	11	12369	3.8	476	5	6	13588	505	2	12471	483
		WISCONSIN	129	202	12254	3.9	480	119	14	12834	485	1	12567	475
		MINNESOTA	62	112	12081	3.9	465	59	14	12426	453	2	11639	430
		IOWA	13	23	11597	3.8	436	12	12	12535	453	2	11256	425
		MISSOURI	2	2	10875	4.7	518	2	5	10800	431	1	12089	459
		NEBRASKA	3	7	10373	4.0	412	3	13	14687	515	2	11825	446
		KANSAS	4	10	10213	4.1	413							
		WASHINGTON	6	19	14805	3.8	550	6	20	15274	544	2	14422	521
910991		ILLINOIS	56	58	13024	3.8	494	53	14	12575	466	1	12996	477
		MICHIGAN	10	12	12167	3.8	460	10	8	11578	445	1	12694	498
		WISCONSIN	109	114	13384	3.7	499	108	12	13317	495	1	13503	503
		MINNESOTA	69	75	14018	3.6	506	68	19	13164	488	1	13418	489
		IOWA	16	22	14952	3.8	561	14	13	13597	505	2	11447	501
		KANSAS	1	2	13505	3.7	495	1	34	13675	484	1	15151	555
		NORTH CAROLINA	1	1	13600	3.3	453	1	12	12320	458	1	14628	522
		TEXAS	3	3	12063	3.9	462	3	53	10693	387	1	10355	387
		IDAHO	45	74	13656	3.7	495	38	12	13053	478	1	12811	470
		COLORADO	5	8	11717	3.8	450	5	11	10614	391	1	10377	373
		ARIZONA	3	5	14292	3.7	522	2	18	13553	485	1	12912	469
		UTAH	39	53	13919	3.6	504	38	13	14046	504			
		WASHINGTON	76	118	14966	3.8	562	75	27	13675	518	1	13534	516
		OREGON	51	68	12885	3.8	483	45	14	12161	470	1	12050	463
		CALIFORNIA	23	32	16620	3.6	606	22	49	15440	556			
915999		NEW YORK	9	20	12322	4.0	495	4	16	13654	492	2	13637	496
		INDIANA	9	24	12276	3.9	479	9	3	12818	461	2	12108	436
		MICHIGAN	5	6	13294	3.9	517	5	7	13578	505	1	12099	465
		VIRGINIA	6	14	13663	4.0	542	2	58	13983	514	2	14116	508
		NORTH CAROLINA	15	33	11431	4.0	451	13	10	11587	425	2	10959	413
		GEORGIA	2	5	10514	3.6	379	1	27	12520	468	2	12312	435
		FLORIDA	2	4	9613	3.5	336	2	43	8058	366	2	8127	366
921070		ILLINOIS	11	11	10238	3.7	375	9	18	11659	437	1	12361	455
		MICHIGAN	1	1	14990	3.3	497	1	10	13270	523	1	13799	525
		WISCONSIN	24	24	12354	3.5	436	23	11	12349	446	1	12415	456
		MINNESOTA	6	7	12821	3.5	444	6	6	12690	457	1	14293	529
		SOUTH DAKOTA	1	1	13610	4.0	540	1	9	12520	415			
		NEBRASKA	1	1	11770	3.6	421	1	3	12200	442	1	13363	509
		NORTH CAROLINA	1	1	12770	4.1	525	1	12	12380	452	1	14628	522
		IDAHO	38	64	13896	3.6	495	35	11	14566	533	1	13109	479
		COLORADO	2	4	12765	3.5	442	2	20	12145	449			
		ARIZONA	1	2	14310	3.3	467	1	12	15400	604	1	12546	474
		UTAH	19	22	14216	3.5	494	19	14	14398	517			
		WASHINGTON	51	84	13994	3.6	509	51	22	13402	505	1	13240	505
		OREGON	29	43	13364	3.6	471	28	16	12825	471	1	12188	458
		CALIFORNIA	14	29	13697	3.7	499	14	39	14923	541			
926363		MASSACHUSETTS	2	3	11603	3.7	430	2	12	13508	505	2	12443	462
		CONNECTICUT	1	7	16399	3.3	548	1	11	14986	546	7	14509	531
		NEW YORK	53	87	12301	3.7	452	20	15	13353	489	2	13304	486
		NEW JERSEY	2	6	12794	3.8	482	1	10	13285	492	2	12018	447
		OHIO	10	19	11300	3.5	393	10	7	11424	410	1	12483	450
		INDIANA	55	112	11328	3.6	425	53	7	12318	458	2	12173	448
		MICHIGAN	31	61	12237	3.7	450	31	8	12861	470	2	12778	468
		IOWA	4	8	12934	3.8	489	3	14	12328	458	2	12429	487
		MISSOURI	8	10	12454	3.7	458	7	18	12143	445	1	11686	437
		NEBRASKA	2	3	11920	3.9	463	2	9	12428	485	2	12424	483
		KANSAS	1	1	9870	3.5	342					1	14083	471
		MARYLAND	4	5	10620	4.6	485	4	46	12030	552	1	11718	570
		VIRGINIA	7	13	12093	3.7	442	3	32	12933	472	2	12616	455
		NORTH CAROLINA	55	121	10472	3.8	393	53	12	10316	392	2	10424	399
		GEORGIA	20	32	10070	3.9	389	19	37	9592	369	1	9247	360
		FLORIDA	2	9	10615	4.3	451	1	22	8425	381	3	9214	432
		KENTUCKY	1	2	12045	3.7	442	1	7	12920	486	2	12508	471
		OKLAHOMA	2	3	15460	3.9	590	2	12	14518	504	1	12361	474

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	NO.	RECORDS LB.	FAT LB.
934021	NEW YORK	1	4	16160	3.5	567	1	20	13603	502				
		2	2	9035	3.6	295	2	13	10900	399	1	15238	548	
		1	1	11830	3.8	452						1	11478	393
		145	262	12661	3.7	466	139	14	13146	479	2	13022	477	
		8	10	13491	3.7	492	5	9	13780	503	1	14550	539	
		206	321	12751	3.7	465	186	20	12785	470	1	12759	468	
		16	20	14250	3.6	514	15	23	13817	504	1	12601	479	
		38	67	12835	3.7	472	38	11	12630	457	2	12376	456	
		1	2	10275	4.2	427	1	22	8495	358	2	8094	342	
		2	4	9140	4.0	361	2	1	9798	377	2	9290	368	
		1	1	14600	3.0	432	1	6	14110	506				
		1	1	7690	3.4	259	1	18	9510	354				
		1	2	11345	3.7	412	1	12	11270	390	2	11800	405	
		15	18	13859	3.6	496	13	17	14589	513	1	13470	481	
		1	1	12020	3.8	462	1	16	12420	461				
		8	8	13448	3.6	477	8	14	13974	504				
		10	11	13923	3.8	523	10	34	14192	517	1	12986	479	
		4	5	16106	3.5	568	4	17	16134	576	1	14562	533	
		2	2	13890	3.6	495	1	72	13370	469				
941181	IOWA	2	5	15863	3.7	582	2	3	15900	584	3	14192	531	
		4	4	14548	4.2	611	1	4	13123	500	3	11670	416	
		3	11	13661	3.8	515	1	1	14633	513	2	12492	443	
943139	TEXAS	2	3	12355	3.4	418	2	23	9240	364	1	10355	387	
		19	33	13296	3.7	484	18	12	14449	537	1	14144	519	
		2	6	13400	3.6	473	2	9	14292	505				
		2	3	13053	4.0	516	1	9	19370	706	1	12546	474	
		3	5	13895	3.6	494	3	23	14252	494				
		26	39	15451	3.7	559	26	28	14049	510	1	13653	539	
		20	29	12725	3.7	468	19	15	12085	461	1	12203	463	
943749	CONNECTICUT	1	1	11490	3.9	450	1	22	12960	509	1	13778	534	
		22	30	12924	3.8	488	21	23	13000	479	1	12976	475	
		2	2	7790	4.1	312	2	19	11285	433	1	12274	467	
		7	9	11482	3.8	426	7	14	11351	422	1	11883	436	
		4	4	11643	3.8	440	4	7	11080	400	1	10922	404	
		6	6	13427	4.0	534	6	16	12025	454	1	12637	490	
		124	224	12909	3.6	464	120	12	12875	473	2	12772	467	
		9	12	13261	3.8	500	9	11	12508	492	1	12557	469	
		204	321	12802	3.7	477	194	20	12468	458	1	12635	466	
		11	17	13116	3.7	491	11	13	12450	460	1	12393	469	
		22	43	13042	3.6	463	22	9	12715	461	2	12303	444	
		1	1	12530	3.4	423	1	30	11850	457	1	12546	487	
		1	2	11480	3.9	449	1	13	11680	421	2	10998	417	
		2	3	9218	3.5	317	2	13	10560	382	2	11691	431	
		4	5	14308	3.6	520	3	30	13023	491	1	11151	441	
		16	17	12697	3.6	460	16	27	11575	423	1	11924	431	
		4	5	10110	3.7	369	4	94	9735	363	1	10036	378	
		4	4	11725	3.5	403	4	23	8063	331	1	7745	295	
		1	1	17040	3.8	639	1	13	15910	559	1	18465	641	
		1	1	13980	3.4	478	1	5	15750	612	1	13309	486	
		1	4	13010	3.8	496	1	12	15205	519	2	14977	532	
944849	MICHIGAN	2	7	12468	3.5	436	2	6	11332	416	3	12098	447	
		5	10	13239	3.7	481	5	6	12729	462	1	11692	442	
		11	20	11012	3.6	399	11	10	11825	429	2	11482	419	
		1	1	7470	3.6	266	1	9	11690	411				
		2	2	9530	3.6	339	1	5	12510	452				
		1	2	14940	3.6	543	1	7	14075	502	2	12105	448	
950295	ILLINOIS	21	41	12722	3.7	472	20	24	13033	480	2	12777	465	
		17	30	12272	3.7	456	17	25	12217	453	1	12064	452	
		3	5	12789	3.5	448	3	8	10374	379	2	9987	369	
		1	1	13310	3.6	477								
		1	2	15110	3.6	537	1	29	13885	471	2	13048	468	
950707	PENNSYLVANIA	3	3	12733	3.8	485	3	7	10590	388	1	9298	340	
		18	31	12467	3.7	459	16	14	13558	491	1	13483	489	
		4	6	10329	3.8	393	4	11	10965	408	1	11549	437	
		64	85	12468	3.8	472	58	12	13260	497	1	12750	474	
		49	80	11335	3.6	425	49	19	12397	456	2	11923	453	
		2	3	14410	3.6	513	2	2	13415	500	1	12688	433	
		1	1	8890	3.7	331								
		1	2	11120	3.9	437	1	8	12190	460	2	13778	483	
		1	1	9790	3.6	350	1	101	9640	330	1	13004	449	
		1	1	11820	3.5	416	1	49	10260	397				
952029	VERMONT	2	2	15700	3.5	538	2	27	12905	492	1	12481	469	
		1	1	9080	3.8	344	1	19	13010	526	1	14595	565	
		39	44	13118	3.6	467	34	22	12709	466	1	13212	484	
		7	9	12916	3.6	466	7	32	11689	437	1	11848	451	
		12	18	12659	3.6	452	12	15	11504	434	2	12145	445	
		3	3	14530	3.5	506	3	14	13660	481	1	13827	480	

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREEO	SIRE NO.	RECOROS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO		
								NO. O AUS.	RECOROS NO.	MILK LB.	FAT LB.	RECOROS NO.	MILK LB.	AV. FAT LB.
		INDIANA	15	17	13856	3.7	506	14	12	13086	491	1	13165	498
		ILLINOIS	72	122	13462	3.6	480	68	13	13008	477	2	12739	464
		MICHIGAN	19	22	13421	3.7	494	19	17	13254	489	1	13371	506
		WISCONSIN	82	116	12906	3.7	469	76	21	12673	468	1	12628	468
		MINNESOTA	9	17	11660	3.8	442	8	33	11802	435	2	10725	442
		IOWA	9	16	14171	3.7	514	9	14	13815	491	2	12265	457
		MISSOURI	5	7	15781	3.5	555	5	13	14834	572	2	14868	567
		NEBRASKA	2	3	11370	4.3	474	2	5	10660	419	2	11543	450
		KANSAS	7	7	13927	3.5	493	6	20	12767	485	1	12028	443
		VIRGINIA	5	5	11990	3.8	453	5	44	13324	490	1	13213	504
		NORTH CAROLINA	27	30	11404	3.5	401	27	21	11076	401	1	11386	418
		GEORGIA	6	6	11790	3.8	448	6	51	11613	421	1	9292	363
		FLORIDA	1	1	14270	3.5	506	1	65	12430	452	1	11565	473
		KENTUCKY	3	3	13633	3.6	490	1	14	10710	382	1	9988	377
		ALABAMA	1	1	5900	3.5	208							
		OKLAHOMA	2	2	15280	3.6	548	2	8	16785	543	1	12116	461
		TEXAS	3	3	13997	3.5	489	3	49	12470	460	1	12481	443
954461		MASSACHUSETTS	5	9	12609	3.8	485	5	16	10467	429	2	10713	435
		NEW YORK	63	84	11754	3.7	433	33	18	13305	487	1	13205	481
		NEW JERSEY	4	5	11570	3.7	438	2	12	14200	517	2	12358	450
		PENNSYLVANIA	1	1	13890	3.8	533	1	18	13830	518	1	13658	512
		OHIO	9	11	10903	3.7	397	9	11	11760	427	1	12371	456
		INDIANA	15	24	12645	3.8	477	11	12	12949	484	1	12763	466
		MICHIGAN	23	43	11923	3.8	456	23	13	12490	459	1	12945	478
		MARYLAND	7	12	12650	4.3	543	7	42	12183	573	2	11404	558
		VIRGINIA	14	27	10607	3.8	403	1	3	11623	448	2	11609	450
		NORTH CAROLINA	22	46	11378	3.7	422	22	22	11336	429	2	11586	422
		GEORGIA	14	22	10111	3.7	369	14	23	10107	378	1	9897	376
		MISSISSIPPI	1	1	6120	3.9	238	1	7	5360	229	1	7281	313
959486		MICHIGAN	1	3	11853	4.2	495	1	8	11493	404	2	11642	453
		IOWA	1	1	12030	4.2	505	1	5	14440	506	1	13320	489
		MISSOURI	13	21	11651	3.6	419	13	15	12186	446	2	12506	464
		NEBRASKA	3	4	12542	3.6	452	3	8	12218	471	1	13456	467
		KANSAS	7	10	11494	3.6	413	3	20	11878	433	2	11541	428
965039		NEW JERSEY	1	2	13190	4.4	571	1	5	12670	506	1	11369	436
		MICHIGAN	1	1	9610	3.7	353	1	6	9860	341	1	8927	314
		WISCONSIN	34	47	11156	4.1	460	23	9	11877	449	1	11877	447
		MINNESOTA	16	28	11233	4.0	450	16	17	12311	458	2	11506	423
		MISSOURI	3	7	10859	4.0	436	3	11	12373	421	3	11223	376
966362		MASSACHUSETTS	2	2	12000	3.9	460	2	15	10940	439	1	10715	428
		NEW YORK	24	38	11952	3.6	426	5	17	11535	415	2	11895	427
		NEW JERSEY	3	5	8612	3.6	307	1	7	13000	488	2	13337	502
		OHIO	10	20	12536	3.5	440	10	13	12709	452	2	11633	415
		INDIANA	26	49	12859	3.5	452	25	7	13017	484	2	12637	462
		MICHIGAN	22	45	11624	3.6	415	20	13	11752	447	2	11813	442
		VIRGINIA	6	11	10540	3.6	371	4	30	10713	403	2	11928	438
		NORTH CAROLINA	49	102	11179	3.6	394	49	13	10513	389	2	10524	386
		GEORGIA	16	30	9524	3.7	349	16	43	9390	361	2	9018	355
		FLORIDA	3	7	11396	3.5	398	3	42	8179	374	2	8260	387
967873		VERMONT	4	4	11703	3.7	436	4	39	12068	465	1	12437	460
		MASSACHUSETTS	2	4	13493	3.7	489	2	15	13520	503	2	13165	502
		CONNECTICUT	2	2	14295	3.6	510	2	26	14365	517	1	15538	570
		NEW YORK	199	254	13965	3.6	500	181	21	13232	485	1	13358	490
		NEW JERSEY	15	18	14600	3.5	510	13	25	12465	459	1	11717	443
		PENNSYLVANIA	34	41	12549	3.7	454	33	21	11618	432	1	11976	443
		OHIO	21	25	12313	3.5	427	21	15	12270	441	1	12540	453
		INDIANA	62	77	14321	3.6	522	58	9	13002	480	1	13148	485
		MICHIGAN	52	70	13395	3.7	495	50	17	11909	450	1	12789	483
		IOWA	6	9	14437	3.7	538	6	10	12547	481	2	12565	492
		MISSOURI	14	17	13814	3.6	500	13	18	14538	536	1	12126	470
		NEBRASKA	4	6	11345	3.8	427	4	10	12305	450	1	13422	488
		KANSAS	9	9	13248	3.5	461	5	32	12322	460	1	12417	437
		MARYLAND	5	6	12826	4.7	604	5	36	12417	551	1	12149	565
		VIRGINIA	9	9	12178	3.9	476	8	29	11690	430	1	11591	427
		NORTH CAROLINA	86	98	12293	3.5	432	82	24	11231	412	1	11258	415
		GEORGIA	15	15	11782	3.7	440	15	63	10652	400	1	10332	391
		FLORIDA	4	4	14698	3.7	535	3	91	12827	477	1	11565	473
		KENTUCKY	3	3	11837	3.5	413	2	8	9060	350	1	9712	372
		ALABAMA	3	4	12095	3.5	426	1	93	10330	356	1	9984	353
		OKLAHOMA	2	2	13300	3.5	467	2	13	15920	570	1	18465	641
		TEXAS	2	2	13705	4.0	538	2	56	13425	495	1	13036	475
968544		MASSACHUSETTS	6	10	11831	4.1	486	6	17	12004	483	2	11661	461
		CONNECTICUT	1	2	12770	4.9	629	1	20	15205	581	2	15734	590
		NEW YORK	48	64	11706	3.9	459	20	13	13147	487	1	12529	465
		NEW JERSEY	6	10	11210	4.1	453	1	8	15040	543	2	15277	559
		PENNSYLVANIA	1	1	7400	4.5	330	1	9	11310	447	1	12023	460
		OHIO	23	39	11596	3.8	434	22	16	12647	447	2	12969	457
		INDIANA	42	69	12511	3.9	485	42	7	13027	477	2	12800	476
		ILLINOIS	45	58	11372	3.9	435	40	18	13043	477	1	12813	470

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD			
								NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	AV.
		MICHIGAN	32	55	10456	3.9	405	30	12	12241	449	1	12487	453	
		WISCONSIN	62	78	12204	3.9	479	62	19	13026	487	1	12876	480	
		MINNESOTA	22	24	11153	3.9	432	21	20	12635	465	1	11957	449	
		IOWA	4	4	9203	3.8	341	4	9	12660	450	1	11387	408	
		VIRGINIA	10	16	10915	4.0	428	5	27	11197	414	2	11237	430	
		NORTH CAROLINA	52	80	10453	3.8	399	50	17	10735	404	1	10615	396	
		GEORGIA	20	33	9660	3.8	365	18	24	9932	372	1	9426	355	
		FLORIDA	2	2	8320	4.2	341	2	33	9185	408	1	7892	357	
		MISSISSIPPI	1	1	6730	4.9	332	1	17	6950	313	1	6823	292	
	975137	MASSACHUSETTS	5	6	10152	4.0	406	5	18	11157	448	1	10774	424	
		NEW YORK	132	188	12816	3.7	468	82	18	13331	484	1	13306	486	
		NEW JERSEY	9	15	12415	3.6	445	8	12	12406	449	1	13056	480	
		PENNSYLVANIA	7	13	9751	3.7	360	6	12	11217	398	1	11482	409	
		OHIO	23	38	12255	3.5	425	23	10	12462	439	2	12503	440	
		INDIANA	75	134	13060	3.6	470	73	10	12785	472	2	12925	474	
		ILLINOIS	9	10	13802	3.6	483	9	18	12482	459	1	12418	450	
		MICHIGAN	52	95	12864	3.7	472	51	13	12381	464	1	12780	478	
		WISCONSIN	14	17	12181	3.7	449	14	16	12262	453	1	12548	464	
		MINNESOTA	4	5	12966	3.7	479	4	26	14024	510	1	14094	514	
		IOWA	6	11	11490	3.7	416	5	37	13276	480	2	8816	489	
		MISSOURI	7	9	11630	3.4	389	7	10	11501	435	1	11633	412	
		NEBRASKA	3	6	12127	3.7	452	2	8	12043	468	2	12238	466	
		KANSAS	6	8	14058	3.5	491	2	17	12875	454	1	11280	408	
		MARYLAND	11	11	13124	4.5	584	11	43	12687	586	1	11586	562	
		VIRGINIA	19	29	12451	3.8	472	12	35	12233	447	1	10977	411	
		NORTH CAROLINA	71	97	11173	3.6	402	67	17	10924	403	1	10845	404	
		SOUTH CAROLINA	1	1	16630	3.3	554								
		GEORGIA	24	34	11826	3.5	417	24	53	10043	386	1	10023	380	
		FLORIDA	3	3	10053	3.7	368	1	109	13230	485	1	11565	473	
		KENTUCKY	1	1	11800	3.5	409	1	7	12170	478				
976801		NEW YORK	9	15	11127	3.7	418								
		OHIO	6	20	13101	4.0	515	6	12	12471	428	3	12536	438	
		INDIANA	23	40	12246	3.8	461	19	8	12988	473	2	12566	455	
		MICHIGAN	5	6	12747	3.7	474	4	6	11933	437	1	12655	468	
		WISCONSIN	1	1	13300	3.9	525								
		VIRGINIA	3	7	11964	3.9	470	1	7	14080	508	3	12520	461	
		NORTH CAROLINA	14	33	10441	4.0	412	12	13	10937	399	2	10480	389	
977102		GEORGIA	4	10	10886	3.9	420	4	26	9481	386	2	9567	387	
		IOWA	1	3	12717	3.8	482	1	21	12055	442	3	8858	465	
		MISSOURI	3	10	12419	3.9	480	2	4	12379	433	4	10998	396	
980098		NEBRASKA	2	5	14066	3.4	475	2	8	12379	433	3	13369	466	
		WISCONSIN	1	2	13845	3.7	507	1	6	13800	506	2	10786	381	
		MISSOURI	15	36	11772	3.8	439	12	13	11796	428	2	11124	404	
981308		NEBRASKA	2	4	10783	4.0	427	2	9	10995	414	2	11451	429	
		KANSAS	11	14	10696	3.6	384								
		OKLAHOMA	1	2	12430	4.0	493	1	11	11325	416	2	12018	457	
		VERMONT	3	4	10183	3.9	392	3	16	10507	431	1	10991	422	
		MASSACHUSETTS	1	1	11270	3.6	411	1	24	11850	453	1	12241	481	
		CONNECTICUT	2	3	15090	3.6	539	2	14	15618	560	2	15339	569	
		NEW YORK	46	51	11951	3.6	434	45	23	13208	481	1	13307	485	
		NEW JERSEY	4	4	12860	3.5	455	4	35	11353	440	1	11726	454	
		PENNSYLVANIA	13	14	9648	3.6	350	13	22	11789	437	1	11747	437	
		OHIO	8	8	10216	3.7	375	6	12	13053	464	1	13506	501	
		INDIANA	19	20	11929	3.8	451	14	13	12763	483	1	13203	491	
		ILLINOIS	11	16	12019	3.5	424	8	13	12765	477	1	12310	449	
		MICHIGAN	18	23	11851	3.9	456	17	16	12619	472	1	13275	494	
		WISCONSIN	69	99	11972	3.7	442	57	13	12565	476	1	12534	469	
		MINNESOTA	52	131	12169	3.7	442	44	15	12407	464	2	12047	457	
		IOWA	5	7	13498	3.7	500	5	15	13494	469	2	10113	470	
		MISSOURI	4	7	12331	3.5	431	3	19	12477	464	2	11327	417	
		NEBRASKA	2	3	10210	3.8	387	1	36	13740	501	2	11571	432	
		KANSAS	5	7	11512	3.7	427	5	15	11956	437	1	11965	442	
		VIRGINIA	5	6	9397	4.0	368	5	21	11210	421	1	11802	442	
		NORTH CAROLINA	36	41	10321	3.6	372	34	22	11379	423	1	11349	419	
		GEORGIA	16	17	13962	3.6	496	16	38	12261	477	1	11794	463	
		FLORIDA	1	1	12240	3.6	440	1	97	11840	461	1	11565	473	
		KENTUCKY	1	1	10570	3.9	417	1	14	10720	379	1	9712	372	
		ALABAMA	1	1	14540	2.9	427	1	35	11250	436	1	9112	396	
		OKLAHOMA	3	4	12427	3.6	445	2	4	8345	295	1	9363	335	
		TEXAS	1	1	12970	3.6	468	1	118	12260	439				
		WASHINGTON	2	5	15982	3.8	601	2	26	15484	562	2	15670	569	
982292		NEW YORK	1	1	6410	3.7	239								
		PENNSYLVANIA	3	4	10978	3.7	410	3	17	10687	395	1	11472	425	
		ILLINOIS	42	83	12072	3.6	438	41	12	13104	482	2	13101	476	
		MICHIGAN	1	1	10250	3.5	358	1	7	11020	435	1	11162	460	
		WISCONSIN	89	156	10773	3.7	401	81	31	12209	447	1	12118	445	
		MINNESOTA	3	7	11733	3.8	437	3	7	12436	489	2	11638	442	
		IOWA	13	26	10523	3.7	383	10	8	11845	430	2	11555	431	
		MISSOURI	3	8	11789	3.6	418	3	19	10905	371	2	11256	379	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LBS.	TEST PCT.	FAT LBS.	305-DAY CONTEMPORARY				YEARLY HERO		
								NO. DAUS.	RECORDS NO.	MILK LBS.	FAT LBS.	RECORDS NO.	MILK LBS.	FAT LBS.
		NEBRASKA	2	3	10635	3.9	412	2	23	12173	433	2	11012	385
		TEXAS	1	1	9370	3.5	332					1	7118	317
		ARIZONA	1	2	9375	3.4	313	1	55	11790	394	2	11718	391
		WASHINGTON	5	14	13283	3.8	501	3	23	15215	529	2	14337	499
		OREGON	1	1	9450	3.5	329	1	11	10010	393			
984717		PENNSYLVANIA	3	4	10715	3.6	389	3	9	10017	371	1	10867	402
		ILLINOIS	82	131	12632	3.6	454	81	13	12870	477	1	12730	467
		MICHIGAN	1	1	10110	3.9	394	1	9	11670	454	1	14017	555
		WISCONSIN	109	155	12396	3.7	457	96	30	12682	468	1	12750	474
		MINNESOTA	14	38	11891	3.7	437	9	21	12829	483	2	11348	448
		IOWA	18	25	12439	3.8	464	16	14	12283	441	1	12549	448
		NORTH CAROLINA	2	5	10825	3.5	376	2	12	10359	382	2	10928	385
		TEXAS	2	6	10708	3.3	349	2	10	11955	407	2	13059	440
		WASHINGTON	1	1	11610	3.7	426	1	273	12220	506			
984799		VERMONT	11	16	12805	3.8	483	11	26	12197	483	2	12090	468
		MASSACHUSETTS	7	9	11813	3.9	460	7	13	9554	372	1	11287	433
		CONNECTICUT	11	11	15236	3.7	567	11	13	13485	510	1	14990	559
		NEW YORK	251	295	12684	3.7	469	231	22	13035	479	1	13299	488
		NEW JERSEY	20	25	12624	3.7	464	19	25	12463	461	1	12202	450
		PENNSYLVANIA	32	41	11470	3.7	418	31	16	11705	436	1	11999	449
		OHIO	40	45	12464	3.7	462	35	12	12784	462	1	12210	440
		INDIANA	67	82	13086	3.8	492	60	11	13067	487	1	13056	485
		MICHIGAN	76	98	12575	3.8	474	74	13	12871	479	1	13155	490
		IOWA	5	6	11038	3.9	428	5	9	12426	455	1	12670	467
		MISSOURI	18	23	12282	3.7	453	15	22	13056	484	1	12473	473
		NEBRASKA	2	2	13440	3.6	486	2	6	12150	445	1	12050	448
		KANSAS	19	21	11750	3.8	450	11	34	12569	467	1	12316	455
		MARYLAND	8	8	14599	4.1	605	8	47	12555	533	1	11876	546
		VIRGINIA	21	24	12675	3.8	486	17	26	12463	463	1	12269	459
		NORTH CAROLINA	83	95	11373	3.7	420	78	26	11259	414	1	11322	422
		GEORGIA	30	33	11113	3.7	403	30	63	10527	397	1	10366	399
		FLORIDA	4	4	15785	3.5	559	4	77	12570	477	1	11541	469
		KENTUCKY	5	6	14413	3.7	535	5	4	14144	511	1	10628	380
		ALABAMA	1	1	10100	3.6	366							
		ARKANSAS	1	1	9130	4.1	377	1	19	6610	259	1	12524	448
		TEXAS	4	4	13295	3.7	494	4	86	12698	455	1	13527	468
		COLORADO	1	1	9810	3.7	366	1	25	13290	478			
993764		MASSACHUSETTS	5	5	11796	3.9	453	5	21	12120	477	1	11591	447
		CONNECTICUT	1	1	14690	3.9	566	1	4	14450	517			
		NEW YORK	89	126	12646	3.6	449	68	21	13135	486	1	13248	490
		NEW JERSEY	14	15	11261	3.6	406	11	15	11969	449	1	11744	441
		PENNSYLVANIA	6	10	11629	3.6	414	5	15	12412	463	2	12612	470
		OHIO	17	31	11632	3.5	398	17	11	12966	465	2	12511	448
		INDIANA	34	49	12567	3.6	450	31	10	12848	480	1	12747	475
		ILLINOIS	3	3	10700	3.8	405	3	9	12290	441	1	13734	500
		MICHIGAN	39	63	11731	3.6	419	38	15	12346	460	1	13198	488
		WISCONSIN	5	6	12165	3.5	428	5	14	13571	516	1	13419	507
		MINNESOTA	1	1	12160	3.9	475	1	9	8440	399	1	9112	446
		IOWA	1	1	9830	3.6	356	1	16	12810	491	1	12622	469
		MISSOURI	6	7	11624	3.7	425	4	27	11955	448	1	11783	416
		NEBRASKA	1	1	10940	3.6	394	1	9	14010	480			
		KANSAS	5	6	13005	3.4	443	2	21	12300	439	1	12502	437
		MARYLAND	7	8	11397	4.5	512	7	34	12126	500	1	11922	571
		VIRGINIA	13	18	11841	3.6	427	11	46	12372	455	1	12544	459
		NORTH CAROLINA	51	70	10087	3.7	368	45	23	10260	386	1	10262	386
		GEORGIA	25	40	10185	3.7	368	23	37	9203	365	1	9665	383
		KENTUCKY	3	3	10613	3.7	385	2	8	11080	407	1	10028	414
		ALABAMA	1	1	10480	3.3	348							
1004232		VERMONT	1	1	8610	3.8	325							
		MASSACHUSETTS	5	6	11323	4.4	496	5	19	10999	441	1	10474	418
		CONNECTICUT	1	1	10150	3.8	382	1	18	13550	497	1	14181	514
		NEW YORK	103	134	12942	3.7	483	82	18	12930	478	1	12818	471
		NEW JERSEY	5	6	11962	3.8	457	4	10	11541	425	1	12055	440
		PENNSYLVANIA	19	26	10102	3.7	377	19	12	10406	377	1	11274	416
		OHIO	45	67	13031	3.7	478	43	12	12565	451	1	12311	441
		INDIANA	47	60	13048	3.8	498	40	9	13227	487	1	12882	476
		ILLINOIS	32	34	12377	3.7	457	32	20	12055	444	1	11994	436
		MICHIGAN	74	98	12856	3.8	488	68	12	12415	470	1	12865	486
		WISCONSIN	64	69	13467	3.9	519	63	14	13100	489	1	13248	493
		MINNESOTA	37	51	14099	3.7	511	34	27	13977	490	1	12205	477
		IOWA	8	14	12849	3.6	487	8	21	12763	480	2	11754	481
		MISSOURI	14	19	12184	3.8	457	13	22	12029	440	1	11350	432
		NEBRASKA	2	2	9810	3.9	378	2	19	12375	482	1	12813	497
		KANSAS	1	2	13530	3.6	478	1	1	18270	639	2	14366	494
		MARYLAND	5	7	13274	4.6	609	5	32	12883	577	1	11957	569
		VIRGINIA	16	18	13065	3.8	496	10	32	14095	533	1	13745	518
		NORTH CAROLINA	48	66	10627	3.7	392	45	23	10559	389	1	10771	398
		GEORGIA	19	30	10840	3.9	416	15	23	10253	394	2	9904	381
		FLORIDA	1	2	12670	3.9	492	1	52	8205	381	2	8726	417
		KENTUCKY	2	3	15045	3.7	525	2	8	13750	500	2	10249	394
		ALABAMA	1	1	9610	3.7	352	1	24	6000	243	1	6518	264

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD			AV. LB.	
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.		
1008622	OKLAHOMA	1	1	1	14510	4.5	647	1	16	16370	550					
	TEXAS	2	2	2	13185	3.7	484	2	35	13595	521	1	12524	448		
	COLORADO	1	2	2	18715	3.3	612	1	36	13620	478	2	13881	494		
	VERMONT	1	2	2	11915	3.6	426	1	10	10105	389	2	10176	370		
	MASSACHUSETTS	3	3	3	9793	4.1	404	3	25	12687	508	1	11745	469		
	CONNECTICUT	1	1	1	11570	3.7	428	1	14	15310	571	1	13200	488		
	NEW YORK	88	125	125	12150	3.8	463	59	21	12885	477	1	13130	484		
	NEW JERSEY	8	13	13	11850	4.0	469	6	15	12133	453	2	12143	462		
	PENNSYLVANIA	4	9	9	12948	3.8	489	4	17	11169	414	2	12161	452		
	OHIO	15	27	27	13045	3.6	466	15	10	12294	438	2	12406	449		
	INDIANA	57	90	90	12417	3.8	468	52	8	12920	479	1	12617	474		
	ILLINOIS	15	15	15	13537	3.7	505	15	12	13091	481	1	13761	505		
	MICHIGAN	53	86	86	12859	3.8	488	50	13	12629	477	1	13157	496		
	WISCONSIN	20	23	23	12757	3.8	486	19	15	12087	447	1	12227	449		
	MINNESOTA	4	5	5	14144	3.7	518	4	22	12226	455	1	12380	461		
	IOWA	1	1	1	12930	3.4	444	1	11	13080	490	1	9570	348		
	MISSOURI	8	9	9	12501	3.8	479	8	8	12869	483	1	13511	516		
	NEBRASKA	2	4	4	13295	3.9	507	2	19	11798	451	2	12339	467		
	MARYLAND	3	4	4	10862	4.1	444	3	26	12822	561	1	12370	568		
	VIRGINIA	22	31	31	12555	3.8	481	15	31	12816	483	1	12652	472		
	NORTH CAROLINA	61	104	104	10893	3.8	409	57	25	10788	401	2	10590	397		
	GEORGIA	38	56	56	10819	3.8	410	36	28	9765	386	1	9461	376		
	FLORIDA	2	3	3	12983	4.1	524	1	74	9990	460	2	10328	473		
	KENTUCKY	1	1	1	12240	3.7	453	1	7	12110	472					
	ALABAMA	1	1	1	12060	3.1	374	1	4	12220	349	1	9352	312		
	MISSISSIPPI	1	1	1	6770	3.7	253	1	15	6960	328	1	7281	313		
	COLORADO	1	1	1	11100	3.5	383	1	37	13660	468	1	13527	468		
	1010936	WISCONSIN	2	2	2	12600	3.7	454	2	13	11100	394	1	14497	509	
		IDAHO	29	35	35	14587	3.7	531	26	14	14209	517	1	13996	507	
		ARIZONA	1	1	1	6330	3.3	212	1	100	12150	433	1	13527	482	
		UTAH	11	12	12	12652	3.8	481	11	16	13245	473				
		WASHINGTON	19	23	23	14149	3.8	531	19	33	14500	551	1	14020	526	
		OREGON	14	18	18	13965	3.7	504	11	21	13443	500	1	12307	460	
		CALIFORNIA	1	1	1	13440	3.5	465	1	66	13440	465				
	1011354	TEXAS	1	1	1	10910	3.5	378								
IDAHO		24	38	38	14337	3.7	529	23	14	14465	524	1	13519	490		
COLORADO		3	5	5	13225	3.9	509	3	11	13127	479					
ARIZONA		2	4	4	13873	3.7	501	2	40	13038	472	2	13162	483		
UTAH		13	20	20	15322	3.7	568	13	12	13577	501					
WASHINGTON		27	41	41	14006	3.8	528	25	29	13645	513	1	13845	513		
OREGON		12	15	15	13548	3.8	509	11	22	12837	489	1	12141	472		
CALIFORNIA	1	2	2	14270	3.2	440	1	69	13110	469						
1012593	VERMONT	3	3	3	13223	3.9	486	3	18	12120	561	1	11456	512		
	MASSACHUSETTS	2	2	2	12210	3.8	467	2	21	10065	380	1	10742	410		
	CONNECTICUT	1	1	1	10860	4.0	434	1	12	13700	479	1	13581	474		
	NEW YORK	90	110	110	12657	3.6	452	86	20	13104	481	1	13179	483		
	NEW JERSEY	12	14	14	11358	3.7	421	11	30	11637	435	1	11931	447		
	PENNSYLVANIA	14	19	19	11281	3.6	410	13	20	11494	439	1	11861	455		
	OHIO	8	9	9	13636	3.5	475	8	13	12743	458	1	12873	469		
	INOIANA	33	36	36	13164	3.6	478	27	10	12435	466	1	12661	472		
	MICHIGAN	36	45	45	12555	3.7	458	34	17	12652	476	1	13304	493		
	IOWA	2	6	6	13237	3.6	473	2	22	11993	442	3	8620	460		
	MISSOURI	6	6	6	11840	3.6	426	6	12	10962	406	1	11508	440		
	NEBRASKA	1	3	3	12273	3.9	475	1	13	11963	458	2	12279	482		
	KANSAS	4	4	4	13083	3.5	458	2	34	12520	449	1	12513	453		
	MARYLAND	7	12	12	11203	3.9	434	2	34	12505	512	1	12661	531		
	VIRGINIA	5	5	5	13634	3.8	520	3	19	11197	472	1	11489	449		
	NORTH CAROLINA	27	33	33	11237	3.5	391	25	41	11219	412	1	11395	416		
	GEORGIA	13	14	14	12862	3.6	460	12	40	12405	459	1	11381	431		
	FLORIDA	1	1	1	14230	3.7	522	1	101	12950	497	1	11565	473		
	KENTUCKY	1	1	1	7100	3.6	253	1	12	10370	377	1	10617	377		
	TEXAS	1	1	1	10600	3.3	346	1	26	12090	412					
1020277	VERMONT	2	3	3	11338	3.8	424	2	13	12845	486	2	13042	493		
	MASSACHUSETTS	4	5	5	9845	4.1	401	4	17	11306	447	1	11080	447		
	CONNECTICUT	2	4	4	11850	3.7	429	2	10	13383	478	2	12653	453		
	NEW YORK	126	168	168	12640	3.8	474	88	23	13171	482	1	13241	485		
	NEW JERSEY	4	6	6	13216	3.7	488	2	11	11705	436	2	12116	454		
	PENNSYLVANIA	12	22	22	11354	3.9	436	10	16	11063	422	2	11647	442		
	OHIO	22	37	37	12032	3.7	442	18	10	11743	414	2	12355	439		
	INDIANA	49	75	75	12112	3.8	454	45	7	12282	459	1	12044	449		
	ILLINOIS	7	8	8	10125	3.8	384	6	14	10727	408	1	10719	397		
	MICHIGAN	35	60	60	12281	3.8	462	35	15	12395	461	1	12906	482		
	WISCONSIN	14	20	20	12676	3.7	463	14	13	13032	464	2	13025	484		
	MINNESOTA	18	22	22	13694	3.8	512	18	29	14067	517	1	13912	529		
	IOWA	3	3	3	10133	3.8	384	2	7	14185	545	1	10677	397		
	MISSOURI	12	20	20	11259	3.8	424	11	16	11934	438	2	10803	430		
	NEBRASKA	2	2	2	12945	4.0	511	1	2	13970	465					
	KANSAS	3	3	3	12917	3.8	483	1	3	13110	512					
	MARYLAND	6	7	7	11671	4.4	517	6	41	12546	550	1	12278	557		
	VIRGINIA	18	20	20	13014	3.6	495	11	30	13237	498	1	12441	466		

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		WEST VIRGINIA	1	1	8400	3.6	301	1	13	11510	437	1	10126	379
		NORTH CAROLINA	76	117	11191	3.7	416	74	24	11222	421	1	11042	413
		GEORGIA	26	40	10785	3.8	405	26	31	10128	390	1	10258	397
		FLORIDA	3	4	10637	4.2	441	2	63	10055	470	2	9252	433
		KENTUCKY	1	3	10117	3.6	367	1	8	9670	392	2	9325	384
		ALABAMA	1	1	10800	3.8	410	1	37	12720	462	1	13167	484
		OKLAHOMA	2	3	12110	3.7	445	2	11	12280	424	2	13914	488
1021571		VERMONT	1	1	12890	3.6	469	1	16	12660	489			
		NEW YORK	3	3	11160	3.5	392	2	11	11790	482	1	12375	486
		PENNSYLVANIA	4	4	11330	3.8	430	3	11	10987	417	1	10268	380
		OHIO	2	2	9845	3.8	376	2	10	11465	404	1	11412	399
		INDIANA	1	1	13520	3.6	481	1	2	12390	454	1	10083	353
		ILLINOIS	80	127	12710	3.7	469	75	15	13100	478	1	12896	467
		MICHIGAN	11	11	10303	3.7	383	10	12	12228	449	1	12508	462
		WISCONSIN	123	161	12378	3.7	459	115	21	12671	470	1	12776	474
		MINNESOTA	16	21	12496	3.8	473	16	21	12568	472	1	12198	466
		IOWA	18	23	12206	3.6	440	17	10	12520	463	1	11725	429
		FLORIDA	1	1	8160	3.5	289	1	18	9480	352			
		KENTUCKY	2	2	12150	4.1	491	1	3	9600	403	1	9298	452
		ALABAMA	1	2	10555	4.0	416	1	35	7870	380	1	8894	410
		WASHINGTON	1	1	12230	3.6	438	1	9	12580	459			
1023039		NEW YORK	1	1	15120	3.8	573	1	1	15760	590			
		PENNSYLVANIA	1	2	10900	3.6	393	1	5	12050	470			
		ILLINOIS	10	16	14629	3.6	526	9	10	14217	519	2	14110	503
		MICHIGAN	6	8	10799	3.6	382	6	10	11034	399	1	12346	458
		WISCONSIN	39	53	12857	3.7	475	39	15	13077	490	1	12984	485
		MINNESOTA	45	69	11976	3.6	426	43	19	12248	451	1	12023	449
		IOWA	1	1	10770	2.9	315	1	6	11430	369	1	9963	340
		MISSOURI	1	1	13880	3.8	523	1	2	13820	479			
		SOUTH CAROLINA	1	1	11710	3.6	421	1	77	10250	392	1	9712	378
1023059		ILLINOIS	1	2	17165	3.7	628	1	1	14700	507	2	14525	537
		WISCONSIN	1	1	9690	4.1	395	1	1	12070	482			
		IOWA	2	8	14228	3.3	476	2	9	13152	473	4	12991	473
		ALABAMA	1	1	9450	3.3	316	1	2	4630	170			
		TEXAS	1	2	12725	3.6	451	1	23	7430	289	1	6845	275
		IDAHO	43	63	15028	3.6	541	39	14	13828	507	1	13546	496
		COLORADO	4	6	13055	3.9	495	4	15	12906	475			
		ARIZONA	1	1	12740	3.7	469	1	100	12090	430	1	13527	482
		UTAH	13	18	13521	3.8	508	13	12	13912	505			
		WASHINGTON	86	144	13706	3.7	502	85	25	13566	501	1	13256	501
		OREGON	28	35	14537	3.7	529	27	15	13155	493	1	12480	485
		CALIFORNIA	3	4	17522	3.8	657	3	92	17362	625			
1033908		VERMONT	4	4	15120	3.7	549	4	21	14290	525	1	14091	534
		MASSACHUSETTS	4	5	11303	4.0	442	4	20	11579	454	1	11866	456
		CONNECTICUT	3	3	13430	3.8	506	3	16	13277	517	1	11213	500
		NEW YORK	72	87	12254	3.7	454	70	25	13472	496	1	13602	498
		NEW JERSEY	6	9	12505	3.7	461	6	30	12369	453	1	11951	444
		PENNSYLVANIA	27	33	11472	3.7	421	27	17	11542	430	1	11971	449
		OHIO	15	18	11436	3.6	410	15	15	12467	450	1	12835	459
		INDIANA	25	25	13302	3.8	502	23	15	13288	485	1	12870	472
		MICHIGAN	35	41	13101	3.7	464	34	14	12786	476	1	13309	495
		MISSOURI	9	10	13249	3.6	479	9	25	12664	461	1	11666	453
		KANSAS	4	4	12100	3.9	467	2	62	12460	475	1	12138	430
		VIRGINIA	3	3	11700	3.6	426	3	35	13253	499	1	13669	520
		NORTH CAROLINA	38	40	10688	3.7	395	37	24	10694	394	1	11106	415
		GEORGIA	12	13	11702	3.8	441	12	72	10117	392	1	10508	401
		FLORIDA	3	3	12600	3.8	478	2	55	11840	427	1	10715	419
		KENTUCKY	3	3	11067	3.9	427	3	6	10660	480			
		ALABAMA	1	1	11210	3.4	384	1	130	8990	354	1	10224	385
1035454		PENNSYLVANIA	1	1	12730	3.6	458	1	30	9470	360	1	11053	425
		ILLINOIS	31	34	13069	3.7	478	28	12	12794	464	1	12624	456
		MICHIGAN	4	4	10348	3.5	370	4	10	10788	394	1	11415	429
		WISCONSIN	72	83	12625	3.8	478	70	13	12380	463	1	12899	480
		MINNESOTA	28	39	14948	3.7	544	28	27	13781	502	1	13332	501
		IOWA	8	8	15284	3.6	558	8	25	13118	493	1	12577	460
1040096		INDIANA	1	1	6890	3.8	264	1	1	11610	452			
		ILLINOIS	4	7	10959	3.7	406	4	10	12331	443	2	10344	376
		TEXAS	3	3	12960	3.9	503	1	12	8930	358			
		IDAHO	50	65	14341	3.6	520	46	12	14090	514	1	13197	482
		COLORADO	7	9	13814	3.8	521	6	13	13199	480	1	13789	476
		ARIZONA	2	3	16025	3.6	570	2	8	18290	662	1	14089	505
		UTAH	23	32	15086	3.6	538	23	12	13717	493			
		WASHINGTON	45	52	14197	3.7	524	45	37	13578	517	1	13337	512
		OREGON	16	22	14828	3.7	546	15	18	13941	521	1	13168	489
		CALIFORNIA	3	3	13313	3.7	487	3	67	14657	513			
1040291		KANSAS	1	1	15120	4.0	602	1	35	14410	501	1	14780	522
		TEXAS	11	12	12901	3.8	486	11	17	13188	482	1	12669	406

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		COLORADO	1	1	17240	3.5	607	1	25	16690	601	1	13821	528
		UTAH	1	1	10780	3.5	577	1	12	13170	446			
1045403		MICHIGAN	3	9	10347	4.2	435	3	5	8606	358	2	9959	408
		WISCONSIN	33	52	12030	3.8	460	27	14	12466	468	1	12513	472
		MINNESOTA	46	106	11502	3.8	437	32	17	12179	450	2	11884	437
		MISSOURI	3	9	9686	3.8	372	2	12	12302	441	2	12190	420
		NORTH DAKOTA	1	1	15700	3.8	591	1	9	15190	555	1	14759	523
1049402		WISCONSIN	2	2	16185	3.9	627							
		IDAHO	1	1	17250	3.3	571	1	17	16580	579	1	16579	577
		OREGON	1	1	9870	3.4	539	1	6	11340	400			
1060259		INDIANA	1	1	11610	3.9	452	1	1	6890	264			
		MICHIGAN	4	4	13665	3.5	469	4	29	12910	469	1	14432	533
		WISCONSIN	1	1	13220	3.8	508	1	2	14880	513			
		IOWA	1	1	4190	3.9	164	1	10	10750	382	1	10377	402
		TEXAS	2	2	12155	3.8	451	1	24	9560	348	1	10355	387
		IDAHO	34	47	14119	3.6	505	32	15	13187	491	1	12995	478
		COLORADO	3	3	14467	3.7	527	3	12	13463	499			
		ARIZONA	2	2	13560	3.7	502	2	125	13060	498	1	13941	511
		UTAH	18	26	14338	3.5	502	18	16	13679	497			
		WASHINGTON	31	43	14962	3.6	542	29	24	14135	527	1	13852	535
		OREGON	26	36	13101	3.7	483	25	17	12709	472	1	11918	452
		CALIFORNIA	1	1	13030	3.6	465	1	96	16960	604			
1060822		MICHIGAN	3	5	13932	4.0	556	3	5	13287	529	2	13792	563
		WISCONSIN	8	11	13078	3.7	469	7	11	12592	491	2	11766	448
		MINNESOTA	24	48	12973	3.5	452	22	19	11982	446	2	11467	447
1061174		ILLINOIS	68	78	12361	3.6	447	67	14	12374	457	1	12743	463
		MICHIGAN	3	4	12137	3.7	446	3	10	12333	445	1	12179	449
		WISCONSIN	78	89	12654	3.7	463	76	14	12906	480	1	13375	495
		MINNESOTA	39	52	12738	3.7	468	38	16	12768	472	1	13208	489
		IOWA	34	38	12360	3.7	459	26	12	13317	492	1	13294	485
		NEBRASKA	1	1	12870	3.7	472					1	12230	447
		NORTH CAROLINA	1	1	11670	3.8	447	1	4	8930	323	1	10497	398
		ALABAMA	1	1	12460	3.8	474	1	45	7750	371	1	8502	395
1070850		NEW YORK	2	2	13920	3.2	445	2	9	15375	559	1	13298	470
		NEW JERSEY	1	1	11240	3.4	384	1	14	11860	433	1	11085	445
		PENNSYLVANIA	2	2	9450	3.8	357	2	14	12075	457	1	12699	481
		OHIO	1	1	17570	3.5	622	1	9	14130	503			
		INDIANA	1	1	12120	3.6	440	1	6	15200	590	1	12895	506
		ILLINOIS	25	36	12781	3.5	444	24	16	12081	445	1	12523	454
		MICHIGAN	10	12	11957	3.4	413	10	14	11753	425	1	12519	457
		WISCONSIN	40	50	13554	3.5	471	38	12	12571	466	1	12681	473
		MINNESOTA	45	73	13097	3.5	460	41	18	12574	465	2	11663	456
		IOWA	5	8	13970	3.5	490	4	13	12035	471	2	11721	476
		KANSAS	1	1	13060	3.6	476	1	5	10400	374	1	9919	367
		NORTH CAROLINA	2	2	12980	3.7	472	1	37	11030	416	1	11434	390
1074864		CONNECTICUT	1	1	14630	4.2	619	1	19	13620	497	1	15227	560
		NEW YORK	38	38	13558	3.8	515	36	24	12328	450	1	12942	468
		NEW JERSEY	6	6	13798	4.0	538	6	47	12755	478	1	12726	475
		PENNSYLVANIA	9	10	12379	3.8	469	9	18	11528	436	1	12375	472
		OHIO	2	2	12550	4.4	554	2	14	12765	468	1	12094	446
		INDIANA	11	11	15149	3.8	581	11	9	13204	491	1	14011	520
		MICHIGAN	11	11	13065	3.7	475	11	11	13405	488	1	13090	477
		IOWA	2	2	15755	3.5	549	2	20	14350	572	1	13429	515
		KANSAS	2	2	13570	4.0	531	2	22	12725	456	1	12961	471
		MARYLAND	1	1	10410	3.9	402	1	14	13150	508			
		VIRGINIA	4	4	12908	3.9	495	4	42	12330	453	1	12964	484
		WEST VIRGINIA	1	2	16500	3.9	637	1	21	11220	395	2	10524	402
		NORTH CAROLINA	12	12	11538	3.8	433	12	30	10869	402	1	12161	445
		GEORGIA	2	2	11205	3.5	383	2	4	6460	240	1	9854	354
		FLORIDA	1	1	13580	3.5	471	1	109	13210	484	1	11565	473
		KENTUCKY	1	1	11020	3.8	414	1	14	10690	379	1	9712	372
1075280		ILLINOIS	5	6	13544	3.8	511	5	16	13162	480	1	12922	479
		MICHIGAN	1	2	14165	4.2	601	1	13	13030	505	1	13876	547
		WISCONSIN	4	6	13419	3.6	486	4	13	11215	426	2	12556	476
		MINNESOTA	2	4	12904	3.8	488	2	43	14050	509	2	11615	477
		IOWA	3	5	17487	3.9	684	3	12	13953	551	2	12591	538
		IDAHO	13	13	14703	3.7	536	12	14	14497	535	1	13816	508
		COLORADO	1	1	14890	4.0	591	1	20	12400	460			
		UTAH	11	12	15364	3.8	586	11	13	13935	513			
		WASHINGTON	21	21	14751	3.8	564	20	32	14086	518	1	13437	517
		OREGON	4	4	17103	3.6	618	4	10	14430	538	1	14391	527
1077788		WISCONSIN	2	2	9775	3.8	375	2	4	12980	491	1	12399	449
		MINNESOTA	1	1	9140	3.9	353							
		IOWA	1	1	5270	4.7	244							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
1088151	NEW YORK NEW JERSEY PENNSYLVANIA OHIO INDIANA ILLINOIS MICHIGAN WISCONSIN MINNESOTA IOWA		8	8	11329	3.7	414	7	10	11043	397	1	13594	496
			3	3	11830	3.8	444	3	12	12280	465	1	12110	453
			9	9	10734	4.1	433	8	7	10258	382	1	11509	434
			10	10	13072	3.7	473	10	11	11982	425	1	12452	439
			6	6	10642	4.1	431	6	8	12262	457	1	11616	434
			26	31	13463	3.9	517	26	13	13196	481	1	13423	490
			36	37	11753	3.9	455	31	9	12350	465	1	12810	482
			44	52	13486	3.9	524	44	14	13039	488	1	13237	493
			21	30	14411	3.9	558	21	17	13426	495	1	13550	496
			1	1	10800	4.3	460	1	16	10220	402	1	11914	470
1092490	CALIFORNIA		7	15	17534	3.5	616							
1116074	NEW YORK OHIO INDIANA MICHIGAN KANSAS VIRGINIA NORTH CAROLINA GEORGIA FLORIDA MISSISSIPPI		17	32	14196	3.7	512	4	15	13215	487	2	13353	490
			3	5	11972	3.4	409	3	6	10710	377	2	11140	382
			17	30	14209	3.5	492	15	6	12853	466	2	13263	494
			10	15	13523	3.5	470	10	7	13945	518	1	13494	487
			1	1	7500	4.0	303							
			5	8	10869	3.5	381	2	9	10435	379			
			24	52	11083	3.5	391	23	15	11043	415	2	10476	400
			8	14	9066	3.6	323	5	17	8649	336	2	9013	352
			1	1	8090	3.8	305	1	21	8290	369	1	7783	349
			1	1	9510	3.4	322	1	12	7420	312			
1132414	WISCONSIN		2	2	11925	3.6	423	2	20	11020	503	1	11216	442
1149460	VERMONT NEW YORK NEW JERSEY PENNSYLVANIA OHIO INDIANA MICHIGAN MISSOURI NORTH CAROLINA FLORIDA ALABAMA		1	1	12130	4.0	480	1	7	12760	467	1	12393	468
			25	25	11529	3.6	417	25	18	13098	477	1	12773	464
			1	1	13060	4.1	536	1	25	12200	437	1	12382	456
			4	4	10690	3.6	388	4	12	11255	413	1	12091	435
			1	1	11400	3.8	436	1	7	13370	543	1	13538	491
			4	4	13540	3.7	491	3	12	13927	526	1	12470	458
			1	1	12180	3.8	463	1	13	11260	421			
			1	1	10140	4.0	404	1	30	11250	420	1	10889	395
			6	6	13957	3.9	538	4	22	12665	471	1	12208	442
			2	2	13425	3.3	430	2	100	12950	499	1	11565	473
			1	1	13400	3.6	489	1	120	8870	353	1	7859	312
1150470	MONTANA IOWA ARIZONA UTAH WASHINGTON OREGON CALIFORNIA		1	1	16030	3.9	621	1	27	12340	426	1	13505	462
			4	5	15068	3.5	515	4	3	13235	487			
			1	1	14080	3.5	496	1	6	17730	625	1	15631	535
			5	5	15390	3.4	530	5	9	12798	482			
			4	4	14593	3.6	526	3	30	15433	566	1	14486	524
			3	3	15727	3.8	598	3	11	15650	615	1	15198	567
			1	1	18760	3.7	694	1	72	16860	594			
1151863	VERMONT CONNECTICUT NEW YORK NEW JERSEY PENNSYLVANIA OHIO INDIANA MICHIGAN IOWA MISSOURI KANSAS VIRGINIA NORTH CAROLINA GEORGIA FLORIDA KENTUCKY		3	3	15750	4.2	657	3	28	12393	489	1	9167	403
			2	2	16015	3.9	612	2	15	14340	548	1	15887	608
			25	27	12480	3.8	474	21	19	12595	459	1	13417	491
			7	7	11376	3.9	443	7	33	12324	462	1	12222	459
			11	12	11549	3.7	431	11	15	11776	436	1	11981	452
			3	3	15993	3.7	567	3	14	13703	517	1	13636	515
			11	11	13272	3.8	505	10	15	12509	465	1	13023	481
			10	10	13492	3.8	517	10	31	13226	484	1	13509	503
			1	1	13800	4.0	553	1	21	11060	391	1	11783	426
			5	5	13632	4.0	535	5	10	13446	494	1	13252	487
			3	3	13233	3.6	480	2	24	12820	466	1	12317	453
			2	2	12540	3.9	483	2	25	12680	469	1	12617	488
			12	12	10318	3.9	399	12	30	9909	374	1	10302	391
			7	7	12130	3.8	457	7	22	11230	413	1	9051	371
			3	3	16647	3.7	604	3	75	12163	472	1	11841	490
			1	1	19150	3.7	717	1	2	16900	566	1	10126	380
1154225	WASHINGTON		6	8	14753	4.1	608					1	14519	574
1154946	MICHIGAN		1	1	11910	4.5	537	1	2	8160	288	1	14661	529
1158029	NEBRASKA		10	20	10789	3.9	420							
1165194	NEW YORK NEW JERSEY PENNSYLVANIA INDIANA MISSOURI NORTH CAROLINA GEORGIA FLORIDA		7	7	12983	3.5	457	7	18	13410	492	1	14116	520
			1	1	13880	3.8	524	1	15	14150	509	1	15478	554
			1	1	10800	3.9	422	1	24	11680	431	1	13331	488
			4	4	10513	4.0	414	4	16	12423	489	1	12641	499
			1	1	14780	3.9	573	1	5	15130	573			
			6	6	9838	3.6	355	5	23	11226	406	1	10008	373
			1	1	8210	4.2	342	1	11	12900	474	1	8295	398
			2	2	13715	3.7	510	2	105	13075	490	1	11516	464
1167093	ILLINOIS MICHIGAN WISCONSIN MINNESOTA IOWA KANSAS		32	33	12322	3.7	462	29	18	12434	459	1	12766	466
			9	9	11439	3.7	432	9	14	11731	438	1	11809	450
			45	45	13424	3.7	490	44	13	13034	479	1	13584	499
			34	41	13367	3.7	498	32	20	13648	504	1	13832	509
			1	1	12900	3.7	474	1	18	11390	425	1	13026	473
			1	1	11920	3.6	424	1	2	12030	413	1	9919	367

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.		
								NO. OAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
	1174286	KANSAS	1	1	13290	4.0	531							
	1175471	IOAHO	10	17	14290	3.9	556	2	4	13320	465			
		UTAH	2	2	17830	3.8	681	2	15	13070	486			
		WASHINGTON	6	6	15118	3.8	574	6	30	14237	544	1	13703	525
		OREGON	3	3	17093	3.9	660	2	12	17070	602	1	15391	528
	1194661	MISSOURI	7	12	15524	3.9	608							
	1232331	MISSOURI	5	10	14123	4.1	584							
	1234776	MISSOURI	1	1	14410	4.0	576							
	1235150	TEXAS	2	3	10660	3.9	399							
JER.	390373	WISCONSIN	6	13	7176	5.4	392	1	6	8428	479	2	8492	480
		MARYLAND	1	4	10348	5.7	593							
		NORTH CAROLINA	5	12	6418	5.3	340	2	10	7792	387	3	6374	314
		FLORIOA	1	1	7700	5.1	390							
	392492	MINNESOTA	4	14	8285	4.8	393							
	400062	WISCONSIN	8	19	6701	5.2	341							
	401669	MICHIGAN	3	5	6991	5.1	355	1	10	6593	364	2	7320	405
		WISCONSIN	8	18	7224	5.3	371	5	11	7764	418	2	7779	422
		MINNESOTA	1	2	7655	4.9	371	1	6	7725	413	2	6807	350
		IOWA	1	1	6200	4.7	292							
	404667	ILLINOIS	1	2	5410	5.2	282	1	7	8455	428	2	7990	401
		MICHIGAN	1	1	4330	5.8	252							
		WISCONSIN	3	3	6733	6.2	420							
		MARYLAND	1	1	6580	6.1	403							
		NORTH CAROLINA	1	1	5960	5.3	315							
	406575	ILLINOIS	1	1	4500	6.3	283							
		WISCONSIN	3	5	6035	6.1	371							
	407306	OHIO	1	4	8200	5.6	457	1	9	8835	451	4	9175	479
		INOIANA	9	14	8064	5.0	400	2	10	7015	368	1	6813	366
		MICHIGAN	3	4	8383	4.9	412	3	29	8457	449			
		NORTH CAROLINA	11	17	7018	5.0	344	5	18	7346	355	2	7882	392
		GEORGIA	11	26	6753	5.0	335	4	19	8091	410	2	7953	400
		FLORIDA	22	44	7177	4.8	341	10	22	7570	377	2	7371	362
	408564	INOIANA	6	16	8544	5.3	449	2	5	8101	430	4	7524	402
		ILLINOIS	2	7	8473	5.3	437	1	5	9878	543	2	9194	492
		WISCONSIN	3	10	8380	5.5	463	1	13	7057	397	1	6573	346
		MARYLAND	3	11	10254	6.0	612							
		NORTH CAROLINA	2	4	8283	5.4	439	1	6	8610	431	1	7608	378
		GEORGIA	1	3	7210	3.5	253							
		FLORIDA	8	27	8352	4.8	399	2	39	8444	422	3	8764	438
	409332	INOIANA	6	11	7755	5.0	392	3	7	8221	399	2	8615	444
		WISCONSIN	5	5	7378	5.2	383	2	21	7475	391	1	8829	456
		MARYLAND	1	1	7040	6.2	436							
		NORTH CAROLINA	8	19	7296	4.9	353	2	10	8837	427	4	7960	399
		GEORGIA	5	16	6349	5.1	330	4	8	7538	383	3	7115	368
		FLORIDA	5	10	7336	5.0	356							
	414388	MICHIGAN	1	4	9500	5.1	489	1	1	7660	438	2	8355	438
		WISCONSIN	9	46	7508	5.4	405	4	8	7827	387	2	7748	391
	420767	NORTH CAROLINA	1	1	6960	5.2	364	1	40	7110	361	1	7434	375
	421181	INOIANA	8	20	7950	5.0	394	1	1	7677	348			
		ILLINOIS	2	3	8453	5.4	438	1	5	9240	462	1	8916	472
		MICHIGAN	2	3	8675	5.3	457							
		WISCONSIN	1	4	4875	5.7	277	1	9	7373	357	1	8698	382
		MARYLAND	4	10	8996	5.6	499							
		NORTH CAROLINA	2	2	5610	4.9	281							
		GEORGIA	1	1	5130	4.8	244							
		FLORIDA	1	1	7140	5.9	422							
		TENNESSEE	1	1	7050	5.5	385							
	423123	MASSACHUSETTS	1	4	5740	5.0	289							
		NEW YORK	1	1	10020	4.4	445	1	11	11400	446	1	11325	458
		INOIANA	1	2	7525	5.0	373							
		MARYLAND	26	68	9987	5.6	554							
		FLORIOA	1	2	6180	5.4	331							
	426702	INDIANA	3	10	8478	5.4	460	1	1	9040	437	1	8807	450
		WISCONSIN	1	1	11580	4.7	544							
		NORTH CAROLINA	2	2	6195	5.5	335							
		FLORIDA	2	3	8138	5.5	445	2	32	7590	371	2	7257	357

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK TEST			305-DAY CONTEMPORARY AV.				YEARLY HERD		
					L8.	PCT.	FAT L8.	NO. DAUS.	RECORDS NO.	MILK L8.	FAT L8.	RECORDS NO.	MILK L8.	FAT L8.
		MICHIGAN	8	13	6050	5.5	340	5	13	7366	399	2	8126	437
		WISCONSIN	12	14	8196	5.2	426	10	12	8644	457	1	8796	469
		MINNESOTA	8	10	8102	5.3	425	7	17	9496	490	1	8627	458
		IOWA	2	3	9558	4.8	453	1	2	8150	386	1	8339	421
		MISSOURI	1	2	9010	5.0	445	1	8	8135	416	2	8682	426
		NORTH CAROLINA	1	1	9030	5.2	474	1	16	7650	409	1	7118	376
		GEORGIA	7	12	6554	5.1	336	4	46	7776	396	2	7567	375
		FLORIDA	11	24	7850	5.0	394	6	55	8056	395	1	8104	398
		ALABAMA	1	5	6886	4.7	326	1	52	8265	391	1	8349	402
		TEXAS	1	1	6470	5.0	321	1	4	7360	375			
462828		ILLINOIS	2	2	7315	5.0	356	2	3	6720	329	1	6802	328
		WISCONSIN	2	2	7550	5.7	421	1	8	8020	453	1	8557	484
		MINNESOTA	1	1	7150	5.9	422							
		WASHINGTON	1	1	10000	5.4	540	1	15	10150	561	1	9854	546
462961		RHOE ISLAND	1	1	6290	4.9	311							
		NEW YORK	1	1	7630	5.2	398							
		INDIANA	4	7	7648	5.0	383	2	4	7190	374	1	7233	378
		MICHIGAN	1	2	7090	5.3	379							
		NORTH CAROLINA	8	12	7646	4.7	362	6	11	8306	387	2	7072	346
		SOUTH CAROLINA	1	2	6975	4.9	340							
		GEORGIA	5	14	5864	4.9	284	1	17	9463	444	2	8829	410
		FLORIDA	10	18	7334	4.8	357	9	45	7953	403	2	7760	384
463576		VERMONT	2	5	8799	5.7	498	1	28	7925	440	2	8153	475
		MASSACHUSETTS	1	1	7120	6.3	448							
		CONNECTICUT	1	2	8335	5.8	486	1	31	9140	490	1	9429	514
		NEW YORK	3	4	7918	5.3	420	2	15	8935	492	2	8851	473
		PENNSYLVANIA	1	4	8203	5.2	425							
		OHIO	6	7	8802	5.2	456	5	22	9416	493	1	9204	498
		INDIANA	9	10	7418	5.4	402	7	14	8301	425	1	8679	447
		ILLINOIS	1	1	7580	5.3	401	1	9	6800	360			
		MICHIGAN	5	10	7263	5.0	364	3	56	8147	422	1	9167	472
		WISCONSIN	5	7	6876	5.6	384							
		IOWA	2	2	7765	5.1	400	1	34	7100	349	1	6289	325
		MISSOURI	5	5	8572	5.2	447	5	9	8420	457	1	8417	409
		KANSAS	3	3	7077	5.6	398							
		VIRGINIA	1	5	10554	4.7	496					1	11543	521
		NORTH CAROLINA	14	18	7836	5.0	396	11	21	7704	378	1	7949	375
		GEORGIA	12	16	7226	5.0	366	4	73	8403	411	1	8149	387
		FLORIDA	18	29	8152	5.0	408	13	55	8390	419	1	8286	410
		ALABAMA	4	5	7214	4.7	336	2	29	7898	396	1	7774	359
		MISSISSIPPI	2	2	7735	5.5	424	2	17	7375	398	1	6682	339
		TEXAS	1	3	7517	4.6	347					1	6780	274
		COLORADO	2	2	7325	5.8	419	2	14	7215	383	1	8012	423
		WASHINGTON	1	4	9723	6.0	586	1	6	10240	541	2	11298	577
466643		VERMONT	6	7	9359	5.5	517	6	19	9633	560	1	9439	531
		CONNECTICUT	1	1	6410	4.2	272	1	3	9270	477	1	9701	525
		NEW YORK	5	6	7375	5.6	411	2	14	7305	388	1	7985	400
		INDIANA	4	6	8633	5.2	445	2	11	8895	461	1	9636	526
		ILLINOIS	4	8	9324	5.4	507	2	31	11430	585	1	10290	521
		MICHIGAN	8	9	6829	5.3	369	4	4	10363	530	1	8440	446
		WISCONSIN	5	7	10161	5.2	527	1	6	8275	431	1	8491	457
		MINNESOTA	3	4	8905	5.5	486	3	18	8247	423	2	8660	462
		NORTH CAROLINA	4	4	5575	5.0	290	2	20	5710	279	1	6344	301
		GEORGIA	7	14	6872	5.0	344					1	10224	365
		FLORIDA	12	29	8075	5.1	408	3	40	8501	418	2	8432	417
		MISSISSIPPI	2	3	6795	5.7	382	2	26	7955	411	1	6698	343
		TEXAS	8	14	6857	5.2	347	6	21	7945	371	1	7259	342
		IDAHO	12	18	8430	5.2	436	11	16	8242	428	1	8243	419
		COLORADO	1	4	8195	5.9	486	1	30	7900	466	2	7777	458
		UTAH	12	23	8706	5.4	465	12	18	8159	430			
		WASHINGTON	17	22	8797	5.3	469	15	21	9325	492	1	9329	499
		OREGON	15	22	8139	5.6	454	11	25	9532	518	1	9559	503
		CALIFORNIA	1	1	4130	4.8	199	1	5	3700	173			
470112		WISCONSIN	1	1	6670	5.5	367							
		MINNESOTA	1	2	8240	5.1	416	1	7	8490	430	2	7772	379
471803		IDAHO	3	5	8897	5.6	491	2	8	8778	462	2	8996	477
		WASHINGTON	9	16	8904	5.7	502	5	35	9292	473	2	8580	448
		OREGON	5	11	10501	5.4	562	2	15	10008	532	1	9145	485
472114		VERMONT	3	4	7515	5.2	389	2	36	8625	462	1	9036	473
		PENNSYLVANIA	1	1	2690	5.4	146	1	7	5950	309	1	10366	513
		INDIANA	2	3	7630	5.9	444	2	16	8140	434	1	7750	421
		ILLINOIS	3	5	6106	5.2	421	2	23	9295	467	1	10290	521
		MICHIGAN	2	3	6015	5.1	307	2	13	6370	320	1	7330	385
		WISCONSIN	3	5	9454	5.1	475	2	24	8375	457	2	8205	444
		MINNESOTA	7	7	7646	5.4	403	6	23	8347	444	1	8647	460
		IOWA	1	1	7030	6.3	441							
		GEORGIA	1	1	4110	4.4	182	1	16	4970	206	1	9854	436
		TEXAS	4	4	7663	5.1	384	2	27	9015	449	1	8666	409

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LBS.	TEST PCT.	FAT LBS.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.			
								NO. DAUS.	RECORDS NO.	MILK LBS.	FAT LBS.	RECORDS NO.	MILK LBS.	FAT LBS.	AV.
		IDAHO	14	21	7865	5.3	412	13	19	8443	439	1	8180	424	
		NEW MEXICO	1	2	7480	5.2	391	1	10	10240	543				
		UTAH	9	23	7887	5.1	403	9	19	7915	412				
		NEVADA	2	3	8195	6.0	486	1	19	9570	521	1	10301	559	
		WASHINGTON	15	30	9098	5.4	490	11	14	9128	487	1	9499	469	
		OREGON	29	53	9371	5.5	509	18	16	9618	518	1	9731	517	
475680		OHIO	1	2	7020	4.8	338	1	19	6975	340				
		INDIANA	2	4	8215	5.3	428	2	10	7813	433	2	8325	449	
		MICHIGAN	5	9	7955	5.5	423	3	13	7969	425	1	8767	465	
		WISCONSIN	7	7	6600	5.2	342	2	25	8565	457	1	8099	431	
		MINNESOTA	2	4	8325	5.1	428	2	14	9253	502	2	9456	501	
		NORTH CAROLINA	2	4	9372	4.9	455	1	3	9285	438	3	9018	430	
		GEORGIA	5	7	8607	4.9	405	1	5	7800	374	1	7325	350	
		FLORIDA	11	30	8149	4.9	399	6	42	8689	424	2	8580	424	
		MISSISSIPPI	2	5	6308	5.2	332	2	42	7229	370	2	6584	335	
478616		WISCONSIN	5	6	7459	5.2	387	2	12	6833	374	2	7031	389	
		IOWA	1	2	6130	5.5	339								
479243		WISCONSIN	2	4	8700	5.3	458	2	19	8400	429	2	7649	408	
		IOWA	10	14	6664	5.2	348	2	6	8900	451	2	8146	430	
484914		WISCONSIN	4	8	8396	5.4	453	3	14	7922	413	2	8122	423	
		MINNESOTA	1	3	7983	6.1	486	1	16	8465	430	1	9505	501	
490707		NEW YORK	3	3	8737	5.2	453	1	62	8470	421	1	7728	399	
		INDIANA	1	2	8655	4.8	412								
		ILLINOIS	1	2	7660	3.7	286	1	12	8260	433	1	8186	434	
		MICHIGAN	1	3	7313	5.7	419								
		IOWA	3	4	7692	5.1	394	3	5	8353	427	1	8215	433	
		MISSOURI	1	3	6217	5.9	368	1	10	6695	380	2	6584	381	
		WEST VIRGINIA	1	1	5640	5.2	292								
		GEORGIA	7	11	7929	5.0	395	3	14	8077	401	2	9383	459	
		FLORIDA	5	9	8068	5.1	413	3	68	8667	436	1	8548	434	
493505		WISCONSIN	11	21	8780	5.2	452	8	20	8061	429	1	8083	430	
		MINNESOTA	7	15	8976	5.3	478	7	17	9080	462	1	8334	436	
		IOWA	6	6	6735	5.6	371	6	13	6917	356	1	7824	418	
		MISSOURI	4	4	9090	5.2	470	4	15	9938	508	1	8186	398	
496820		VERMONT	18	37	7508	5.2	391	7	29	7744	416	1	8012	416	
		NEW YORK	10	17	8531	5.0	421	7	34	7986	409	1	8336	419	
		OHIO	1	1	10030	5.3	528	1	4	8550	436	1	8611	459	
		INDIANA	11	17	7213	5.4	383	9	12	8391	441	2	8150	418	
		MICHIGAN	4	10	8548	5.0	425	3	27	8113	409	1	8310	427	
		WISCONSIN	1	2	3805	5.5	209								
		IOWA	1	1	9270	4.9	457	1	23	7880	424	1	7935	429	
		MISSOURI	8	14	8783	5.0	434	8	12	8690	452	2	8410	430	
		NEBRASKA	1	1	7920	4.8	378	1	15	7940	441				
		KANSAS	1	3	9767	5.1	500								
		NORTH CAROLINA	8	10	7553	4.9	366	7	20	7529	382	1	7739	391	
		GEORGIA	20	23	8071	5.1	406	10	45	8292	402	1	8704	422	
		FLORIDA	15	23	7218	5.2	372	11	67	8310	418	1	8343	421	
		ALABAMA	9	11	6556	4.7	306	7	59	7513	348	1	7344	339	
		MISSISSIPPI	6	8	8158	5.3	434	5	25	8018	412	1	6856	352	
		OKLAHOMA	1	1	4970	5.9	295	1	10	4190	231				
		IDAHO	8	10	9094	5.2	472	7	10	8536	451	1	8742	456	
		UTAH	5	5	7920	5.3	424	5	9	8258	435				
		WASHINGTON	2	3	8260	5.2	431	2	14	7645	420	2	8709	467	
		OREGON	5	7	9253	5.3	492	5	18	9224	494	1	10882	569	
		CALIFORNIA	1	1	8930	4.6	408	1	2	1770	81				
497599		VERMONT	11	19	7951	5.2	412	7	18	8116	443	1	8526	443	
		MASSACHUSETTS	1	1	8930	5.1	456								
		NEW YORK	8	12	7188	5.0	358	4	50	8316	421	2	8787	441	
		NEW JERSEY	1	1	7820	6.0	469	1	32	8390	432	1	9003	452	
		PENNSYLVANIA	1	1	11560	5.0	580	1	7	8160	428	1	10366	513	
		OHIO	8	13	8427	5.2	435	7	20	9043	474	1	8888	477	
		INDIANA	13	19	7481	5.2	385	5	12	8032	411	2	8192	424	
		ILLINOIS	4	8	8625	5.3	456	4	20	9038	460	1	9472	499	
		MICHIGAN	6	9	9123	4.9	449	5	31	7877	409	1	8758	453	
		MINNESOTA	2	3	6758	5.0	334	2	9	7435	375	1	9058	388	
		IOWA	1	1	5510	4.6	251	1	16	6910	354	1	6039	324	
		MISSOURI	9	13	9313	5.2	483	8	18	9459	500	2	8152	477	
		KANSAS	2	2	6815	5.5	368								
		VIRGINIA	1	2	6230	4.6	285	1	8	5455	278	1	7238	359	
		NORTH CAROLINA	24	32	6677	5.0	332	22	34	7662	374	1	7776	376	
		GEORGIA	27	32	7255	5.1	369	18	62	8425	415	1	8093	396	
		FLORIDA	21	36	7877	5.0	393	14	48	8498	422	1	8375	408	
		ALABAMA	5	7	9844	4.9	476	2	10	9565	436	1	10453	436	
		MISSISSIPPI	3	4	7352	4.8	351	3	39	7652	393	1	7102	367	
		OKLAHOMA	2	3	4920	5.3	263	1	2	7010	412	1	6605	335	
		TEXAS	4	6	7179	4.8	340	3	20	6933	324	1	7259	342	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUDY, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	Breed	Sire No.	Records from State	Daughters No.	Records No.	305-Day		Contemporary		Av. Fat	Yearly		Hero	Av. Fat		
						No. Oals.	Records No.	Milk Lb.	Pct. Lb.		Records No.	Milk Lb.				
49B154		WISCONSIN	1	1	7570	5.5	417	1	6	7110	409					
		TEXAS	4	8	5159	5.3	276	3	12	6838	316	1	7227	340		
		IOAHO	4	9	8110	5.4	435	3	10	8582	442	2	7722	397		
		UTAH	4	6	7871	5.7	446	4	16	8744	447					
		WASHINGTON	9	13	8533	5.3	456	6	28	8948	486	1	9669	532		
		OREGON	12	19	9236	5.6	516	7	16	9622	513	1	10149	537		
		CALIFORNIA	1	1	9820	4.7	458									
502114		NEW HAMPSHIRE	1	1	6770	5.4	366	1	7	7710	377	1	7303	360		
		VERMONT	12	16	8469	5.3	450	6	34	8670	468	1	9119	470		
		NEW YORK	8	9	8999	5.3	470	7	20	8153	438	1	9195	500		
		PENNSYLVANIA	4	4	6615	5.2	342	4	8	7150	373	1	9652	499		
		OHIO	7	7	9190	5.0	447	6	31	9210	473	1	9332	496		
		INOIANA	3	3	8640	5.1	445	2	5	9935	519	1	8066	412		
		ILLINOIS	3	3	8893	5.2	457	2	19	9885	548	1	8415	469		
		MICHIGAN	15	17	8431	5.2	439	10	14	6951	368	1	8099	436		
		WISCONSIN	7	7	7514	4.9	360	5	14	8110	435	1	8404	457		
		MINNESOTA	3	3	9270	5.0	468	3	14	8623	436	1	9500	477		
		IOWA	1	1	6380	5.6	358	1	2	5540	326	1	7521	407		
		MISSOURI	14	20	9796	5.2	508	11	16	8681	456	1	9178	468		
		KANSAS	1	2	8740	5.1	443									
		VIRGINIA	3	3	6480	5.2	339									
		NORTH CAROLINA	35	46	7687	5.1	391	25	22	7212	366	1	8015	390		
		GEORGIA	9	10	9340	4.8	449	6	21	8012	403	1	8686	435		
		FLORIOA	16	25	7683	5.0	384	13	83	8074	399	1	8347	420		
		ALABAMA	2	3	3750	4.4	163	1	141	5250	241	1	5690	244		
		MISSISSIPPI	4	10	8650	5.0	428	4	16	8674	437	2	7333	381		
		OKLAHOMA	2	2	7335	5.6	408	2	5	8200	473	1	7172	386		
		TEXAS	1	1	6940	4.8	336	1	37	7720	338	1	7259	342		
		COLORA00	1	1	6260	5.2	325	1	2	5840	306					
		502220		ILLINOIS	3	4	6957	5.5	386	2	33	9025	466	1	7990	422
				WISCONSIN	2	2	7850	5.0	387	1	9	8010	439			
				MINNESOTA	5	9	9746	5.0	481	5	20	11668	583	1	9073	480
				IOAHO	15	15	9086	5.2	473	8	15	8576	456	1	9450	489
				UTAH	4	7	9167	5.1	463	4	22	8480	443			
				WASHINGTON	9	9	8590	5.3	449	9	14	8158	445	1	8650	463
				OREGON	22	30	9501	5.2	496	20	30	9747	518	1	9657	514
				506697		MAINE	1	1	8020	5.2	415	1	11	6520	354	1
VERMONT	27	44	8575			5.2	449	18	28	8641	464	1	8677	454		
MASSACHUSETTS	2	4	8799			4.9	436	1	8	8270	419	1	9527	504		
NEW YORK	14	17	9256			5.0	459	13	30	8026	419	1	8139	433		
NEW JERSEY	1	1	6430			6.2	398					1	9668	495		
PENNSYLVANIA	2	2	7985			5.8	467	1	17	8800	488	1	8938	479		
OHIO	8	10	9556			5.1	484	7	34	9109	472	1	9420	508		
INOIANA	16	20	9096			5.1	460	13	15	8275	443	1	8364	432		
ILLINOIS	1	1	7780			5.4	422	1	8	7390	404					
MICHIGAN	5	5	8144			5.3	426	5	10	7408	405	1	7674	423		
WISCONSIN	1	1	4110			5.5	227									
MISSOURI	11	12	8296			5.2	438	8	15	8238	436	1	8852	438		
KANSAS	4	6	8625			5.2	443	3	14	6657	344	1	7303	377		
VIRGINIA	2	2	8660			5.5	471									
NORTH CAROLINA	28	44	7965			5.1	405	23	24	7269	367	1	7371	369		
GEORGIA	28	34	8570			5.0	432	16	51	8657	434	1	8819	417		
FLORIOA	21	27	7836			4.9	387	14	79	8289	405	1	8398	415		
ALABAMA	7	11	7485			4.9	366	4	57	8476	382	1	9506	413		
MISSISSIPPI	6	9	8733			5.1	447	6	16	8146	415	1	7116	367		
TEXAS	5	6	6270			5.2	323	5	19	6290	315	1	8211	410		
50B176		VERMONT	5	5	9148	4.8	440	5	70	7978	422	1	8709	468		
		NEW YORK	5	6	8054	4.6	364	5	11	7942	428	2	8001	423		
		PENNSYLVANIA	1	1	10190	4.9	496	1	1	10940	377					
		OHIO	1	1	11010	4.8	526	1	48	8800	459	1	9450	509		
		INOIANA	2	3	10080	4.9	493	2	20	8630	445	1	9314	468		
		MICHIGAN	1	3	7753	4.9	382	1	5	8050	391	1	8404	412		
		KANSAS	2	2	7915	5.1	404	1	18	7150	372	1	7488	373		
		VIRGINIA	3	3	7417	5.4	396									
		NORTH CAROLINA	11	11	7993	4.9	390	11	22	7215	358	1	7258	367		
		GEORGIA	7	7	9741	4.6	450	5	25	8816	466	1	8509	394		
		ALABAMA	4	5	10071	4.7	474	4	54	9378	444	1	8987	411		
		510322		NEW HAMPSHIRE	2	2	10275	5.0	506	2	18	9590	534	1	9886	560
				VERMONT	11	16	8474	5.4	455	7	45	8856	490	1	9031	499
				NEW YORK	2	3	5930	4.9	291	1	61	8560	426	2	8240	407
PENNSYLVANIA	2			5	7267	5.1	371	2	44	7873	409	2	7818	429		
OHIO	4			8	8379	4.9	400	3	17	8823	448	2	9129	485		
INOIANA	6			8	8563	5.1	433	5	13	8579	441	1	7897	415		
MICHIGAN	6			11	7068	5.4	376	6	31	7798	405	1	8520	454		
MISSOURI	8			13	8137	5.5	448	8	15	8089	437	2	7935	435		
KANSAS	4			4	6758	5.5	369	1	28	7670	395					
NORTH CAROLINA	10			12	7291	5.2	377	8	25	7826	393	1	7696	379		
GEORGIA	18			24	7217	5.2	372	9	48	8229	407	1	8603	397		
FLORIOA	5			6	6176	5.0	306	4	30	7983	403	1	7766	393		
ALABAMA	8			10	5539	4.8	266	7	56	7287	322	1	7714	323		

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.		
								NO. OAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		TEXAS	5	5	6742	5.0	335	5	20	7092	331	1	7423	366
		COLORADO	3	3	8547	5.1	440	2	5	6555	339	1	8044	413
	518988	OHIO	1	1	9660	4.4	426							
	519244	VERMONT	8	8	8044	5.6	452	5	38	8566	453	1	8644	451
		NEW YORK	5	6	7266	5.2	380	3	24	7247	350	1	7717	409
		INDIANA	1	1	8520	5.4	456	1	14	8750	447			
		MISSOURI	2	2	7765	5.8	437	1	13	7270	404			
		KANSAS	4	4	7733	5.5	422	4	16	6715	347	1	7026	372
		VIRGINIA	1	1	7940	5.2	410	1	24	8310	420	1	9025	452
		NORTH CAROLINA	6	6	6115	5.1	312	5	18	6658	336	1	7810	384
		GEORGIA	4	4	6720	5.2	361	3	46	9363	451	1	9687	458
		FLORIDA	5	5	7884	5.3	418	4	61	8390	425	1	7990	417
		ALABAMA	2	2	5965	5.2	308	1	8	8540	361	1	8868	363
		MISSISSIPPI	1	1	9320	4.5	416	1	13	8480	437	1	7717	404
		TEXAS	2	2	8300	5.2	431	2	6	6420	330	1	7750	413
		COLORADO	2	2	6765	5.2	346	2	17	8220	427	1	8840	457
	520690	VERMONT	1	1	7380	5.7	421							
		NEW YORK	3	3	7680	5.4	413	2	13	7945	422	1	7777	405
		MICHIGAN	2	2	5345	5.4	284	2	3	8455	250	1	7685	405
		MISSOURI	2	2	8385	5.8	482	2	3	8750	478	1	8971	487
		KANSAS	2	2	7360	5.4	394	2	24	7420	381	1	6704	350
		NORTH CAROLINA	1	1	5740	5.0	286	1	25	5650	275	1	5701	283
		GEORGIA	1	1	9090	5.3	479							
		ALABAMA	1	1	5560	5.7	318							
	524581	WISCONSIN	2	4	8795	5.7	491	2	18	8930	479	1	9772	523
		MINNESOTA	1	1	6720	5.7	382	1	11	7850	423	1	8404	441
		IOAHO	9	11	7799	5.3	409	9	16	7813	414	1	8358	433
		UTAH	9	14	7730	5.2	397	9	14	7962	408			
		NEVADA	1	1	9060	5.9	539	1	28	10110	553	1	10301	559
		WASHINGTON	3	4	8390	5.6	471	3	15	8275	459	1	9022	496
		OREGON	16	26	9874	5.3	523	16	31	9546	508	1	9627	509
	531188	NEW YORK	1	1	8710	5.5	481	1	35	7580	371			
		OHIO	1	1	7160	5.4	384	1	48	8880	462	1	9450	509
		GEORGIA	1	1	2100	5.4	113					1	7488	396
		FLORIDA	2	2	5970	5.1	311	1	10	5560	195			
		ALABAMA	2	3	6698	5.1	338	2	42	7345	355	1	7412	369
	534381	VERMONT	2	6	8962	6.0	546	1	102	9805	526	2	9827	539
		NEW JERSEY	1	1	4430	6.1	271	1	19	6690	382	1	8306	446
		OHIO	3	5	7795	5.3	414	3	6	8998	439	1	8811	428
		INDIANA	2	2	10305	5.6	564	2	18	8110	402			
		MICHIGAN	3	4	12153	5.5	547	3	6	6737	394	1	8720	456
		MISSOURI	4	6	6825	5.5	377	4	18	7990	422	1	6521	407
		KANSAS	2	4	6955	6.0	409							
		NORTH CAROLINA	3	4	5953	5.1	301	2	19	7510	376	1	7717	390
		GEORGIA	5	5	8074	5.5	445	5	94	8744	412	1	7783	363
		FLORIDA	6	7	6581	5.6	367	6	85	8505	421	1	8119	399
		ALABAMA	2	2	5710	5.2	300	1	34	7350	367	1	7047	318
		TEXAS	1	1	6840	4.6	328	1	8	6730	314			
	537552	IOAHO	6	6	9627	5.2	506	6	13	8688	470	1	9974	541
		COLORADO	1	1	10430	5.4	558	1	8	8620	504			
		UTAH	1	1	6680	5.5	369	1	6	9070	517			
		WASHINGTON	2	2	9220	5.4	491	1	3	9900	579	1	11729	515
		OREGON	4	4	9048	5.2	454	3	10	10063	521	1	14203	711
	537666	VERMONT	3	3	7407	5.3	391	2	6	6665	365	1	7516	383
		INDIANA	1	1	8340	4.9	413	1	2	6240	346	1	7129	391
		ILLINOIS	1	1	9060	5.1	462	1	1	9270	451	1	9854	507
		MICHIGAN	1	1	4730	5.2	246	1	3	8030	362	1	7238	370
		IOWA	1	1	7660	5.0	388	1	5	5710	294	1	6006	319
		MISSOURI	1	1	5950	5.0	296	1	6	8560	430	1	9052	494
		NORTH CAROLINA	1	1	9020	5.7	513	1	63	11260	552	1	11129	570
		FLORIDA	2	2	10080	4.4	441	2	38	8900	424			
		ALABAMA	3	3	8363	4.6	383	3	22	9293	421	1	8854	398
	542027	MISSOURI	1	1	8360	5.0	418	1	14	8030	416			
		FLORIDA	2	2	9465	5.4	512	1	9	8340	423			
		COLORADO	1	1	10660	5.0	538	1	8	7210	368	1	8840	457
	545078	OKLAHOMA	2	5	9734	4.9	472							
	554146	IOWA	1	1	10100	5.0	502							
B.S.	46379	NEW JERSEY	1	3	9817	4.5	445							
		INDIANA	7	14	10226	3.9	403	6	6	11231	437	2	10138	398
		ILLINOIS	2	2	7850	4.4	341	1	2	9360	368			
		MICHIGAN	2	3	12060	4.1	491	2	8	11770	484	1	11980	493
		WISCONSIN	5	8	11029	3.8	419	4	9	9864	380	2	9598	360
		MINNESOTA	1	2	8795	3.8	330							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD			
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	AV. FAT LB.
		IOWA	4	7	8673	4.1	353	4	4	8996	369	3	9080	364	
		MISSOURI	2	6	8520	4.4	371	2	7	10357	438	3	9446	407	
		KANSAS	1	2	15030	3.9	588								
		GEORGIA	3	3	5510	4.2	234								
48098		NEW YDRK	1	3	10427	4.0	412					3	10649	400	
		OHIO	1	2	11850	4.3	505	1	23	10015	401	1	9385	376	
		INDIANA	1	1	9340	4.0	375	1	3	11190	440	1	9865	380	
		MICHIGAN	1	4	10610	4.2	443	1	3	13070	518	4	10312	421	
		WISCONSIN	5	12	9820	4.3	424	4	11	9751	374	4	11110	442	
		MINNESOTA	1	1	8550	4.3	372								
		IOWA	2	5	7665	4.4	330	1	4	10577	405	4	11233	456	
		NEBRASKA	1	2	13785	4.2	575	1	7	11420	493	1	8851	384	
48344		OHIO	1	2	10065	3.9	384	1	19	8255	342	2	9233	374	
		INDIANA	1	1	11030	3.6	397	1	1	10680	467	1	10835	436	
		ILLINOIS	1	1	10740	4.0	430								
		WISCONSIN	5	16	9849	3.9	376	4	10	10136	406	2	10271	383	
		MINNESOTA	1	5	10668	4.7	506								
51890		MASSACHUSETTS	1	2	7720	4.7	359								
		NEW YORK	10	22	11728	3.8	448	4	12	11440	472	2	11455	451	
		NEW JERSEY	3	4	7642	4.1	308								
		OHIO	1	2	9440	3.8	362								
		INDIANA	7	8	9806	3.9	385	4	5	8290	341	1	9182	357	
		ILLINDIS	2	2	11420	3.7	423	1	11	9910	382				
		MICHIGAN	6	8	10553	4.0	412	2	2	8340	364	1	11405	465	
		WISCONSIN	11	25	9743	4.1	401	8	11	9354	366	2	10217	402	
		MINNESOTA	3	3	7580	4.5	333	1	10	10020	404	1	9189	377	
		IOWA	1	1	16750	3.2	543					1	12731	516	
		NEBRASKA	1	3	15877	3.9	626	1	5	11255	484	3	9795	410	
		MARYLAND	3	5	13521	4.7	646								
		VIRGINIA	1	1	10280	3.9	402								
		GEORGIA	1	1	12360	3.5	428								
53913		CONNECTICUT	2	2	11685	4.2	484	2	19	11350	502	1	11892	537	
		OHIO	1	1	10800	3.5	381	1	12	11460	444				
		ILLINOIS	3	5	10978	4.1	459	2	16	12798	531	2	12238	515	
		MICHIGAN	1	1	11650	4.2	489								
		WISCONSIN	8	22	9824	4.1	400	7	13	10005	398	2	10011	408	
		IOWA	10	24	11756	3.9	454	8	6	11686	484	2	11846	486	
		MISSOURI	1	1	8710	4.6	397								
		KANSAS	1	1	4790	4.5	214								
		IDAHO	1	6	10130	4.4	447								
58918		NEW YORK	2	3	9658	4.4	419								
		INDIANA	1	1	9430	3.7	351								
		ILLINDIS	1	3	14437	4.1	593	1	3	10557	432	2	10595	418	
		MICHIGAN	2	7	8969	4.3	374	2	4	10226	402	4	9761	394	
		WISCONSIN	6	11	8457	4.2	355	4	13	9894	388	1	9944	382	
		TEXAS	1	2	12140	3.3	402								
59456		IOWA	1	2	6600	4.2	273	1	4	9740	432	2	9206	384	
		MISSOURI	6	7	8884	4.6	400	3	5	8275	339	2	6881	299	
		SOUTH DAKOTA	1	1	9240	4.6	429	1	9	11430	479	1	11249	464	
		NEBRASKA	2	2	11810	4.6	533	1	19	10670	447				
		KANSAS	4	5	10640	4.4	473	1	9	8900	376				
		IDAHO	1	3	12167	4.0	487	1	12	11037	467	3	10333	423	
		CALIFORNIA	1	1	13530	4.2	564								
59620		IOWA	1	2	8345	4.2	353	1	3	8860	396	2	9309	390	
		OREGON	1	4	10025	4.4	435	1	2	11210	364	1	11353	480	
59699		NEW YDRK	4	9	11444	4.2	485	1	34	12785	509	3	12437	478	
		NEW JERSEY	3	4	8078	4.2	341								
		PENNSYLVANIA	1	2	8360	4.6	330								
		OHIO	1	1	11690	4.6	536	1	4	11080	464				
		INDIANA	11	20	9292	4.4	404	6	6	10337	432	2	10456	435	
		ILLINOIS	3	3	10360	4.2	437	2	10	11130	428	1	12012	483	
		MICHIGAN	8	20	10533	4.3	452	7	10	10300	437	1	11074	449	
		WISCONSIN	11	21	9259	4.2	386	9	13	10003	399	2	9821	385	
		MINNESOTA	1	1	15640	3.9	606	1	6	11600	472	1	12284	504	
		IOWA	1	1	9740	4.8	470	1	6	10200	403	1	9756	401	
		NEBRASKA	2	2	10655	4.3	452	1	3	13810	363	1	12034	464	
		KANSAS	4	5	12404	4.3	541	1	22	10550	421	1	11467	435	
		MARYLAND	2	2	11755	4.5	523								
		VIRGINIA	5	7	9123	4.2	375								
		NORTH CAROLINA	2	4	11860	4.3	506								
		FLORIDA	1	1	11300	4.6	522								
		COLORADO	1	2	9506	4.2	397	1	9	10265	427	2	9244	372	
		WASHINGTON	5	9	12153	4.1	499	5	12	11365	472	2	11691	475	
59936		INDIANA	2	6	10569	3.8	400	2	5	11227	464	3	10966	429	
		ILLINOIS	1	2	10140	3.6	369	1	16	12360	500	1	10519	441	
		MICHIGAN	2	5	9769	4.1	392	1	1	8120	318	2	8965	360	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		WISCONSIN	8	20	9015	3.8	336	7	9	9474	365	2	9302	357
		IOWA	2	3	9015	3.9	358	2	6	10645	421	1	8884	359
		NEBRASKA	3	8	8884	4.3	369	2	5	11154	460	3	10190	421
		IDAHO	1	3	17137	4.1	699							
	61565	SOUTH DAKOTA	4	12	11565	4.1	466							
	62834	NEW YORK	3	10	11307	4.2	466	1	21	10830	445	3	11848	487
		ILLINOIS	2	2	6795	4.3	288	1	2	10770	470	1	7445	304
		MICHIGAN	1	3	12177	4.6	559	1	20	12000	495	1	12263	502
		WISCONSIN	1	1	6130	4.2	259							
		MISSOURI	1	2	10320	4.4	455	1	6	9195	377	1	7543	326
		MARYLAND	1	1	17120	4.3	728							
		VIRGINIA	1	1	7950	4.5	357	1	8	7700	328	1	8753	391
		NORTH CAROLINA	1	3	9997	4.4	436							
		WASHINGTON	1	3	10103	4.7	466	1	3	10570	457	1	8720	364
	64541	NEW YORK	2	4	12355	4.5	555	2	16	11103	455	2	11522	479
		OHIO	1	2	12155	4.3	519	1	10	11810	476	2	11914	481
		INDIANA	11	19	11939	4.1	484	9	8	11882	471	1	11072	438
		MICHIGAN	9	18	10435	4.0	414	5	9	10978	440	1	11881	473
		WISCONSIN	1	1	9510	3.8	359	1	9	9200	341			
		MINNESOTA	1	3	12380	4.1	512	1	7	9365	415	1	9494	446
		IOWA	1	3	7833	4.4	347	1	3	8647	378	3	9098	385
		MISSOURI	2	3	9875	3.8	376	2	27	10930	442	1	9211	400
		NEBRASKA	1	3	8693	4.1	357	1	18	11610	471	1	12437	498
		MARYLAND	5	5	13490	4.7	644							
		VIRGINIA	1	1	10150	4.5	456	1	3	10730	470	1	10922	459
		NORTH CAROLINA	1	1	14630	3.8	562							
		GEORGIA	2	2	7690	3.9	300							
		OKLAHOMA	1	1	11590	3.6	419	1	2	9940	405			
		WASHINGTON	2	4	12853	3.9	497	2	6	10570	422	1	11810	472
	64773	NEW YORK	6	13	10210	4.3	434	6	9	10147	412	2	9840	397
		NEW JERSEY	5	7	10361	4.2	439	4	24	12038	500	1	11827	491
		OHIO	3	5	9759	4.2	410	3	12	10203	392	1	10333	407
		INDIANA	14	19	10358	4.4	457	12	5	10860	443	1	10811	448
		ILLINOIS	4	7	9929	3.8	382	3	21	10885	434	1	10368	427
		MICHIGAN	9	18	10203	4.4	448	8	18	10535	425	2	10071	411
		WISCONSIN	6	18	9251	4.3	401	5	10	10331	407	2	10109	404
		IOWA	5	9	9903	4.4	430	4	6	10120	434	2	9055	385
		MISSOURI	5	7	10571	4.2	440	4	16	9993	410	1	8573	372
		NEBRASKA	4	4	11795	4.3	501	4	14	11125	471			
		KANSAS	5	8	8855	4.4	391	2	18	9035	360	1	8960	377
		MARYLAND	1	1	13930	4.5	631							
		GEORGIA	3	5	11275	4.3	475							
		ALABAMA	1	1	9920	4.1	410					1	8088	311
		OKLAHOMA	1	1	9560	4.1	396					1	9385	361
		IDAHO	2	3	11785	4.3	500	1	25	11750	492	1	11064	451
		COLORADO	3	5	13398	4.0	531	3	6	14288	550	1	9974	402
		UTAH	1	3	10147	4.0	405							
		WASHINGTON	3	4	12695	4.3	542	3	8	11298	463	1	11518	469
		CALIFORNIA	2	3	12578	4.3	535							
	67525	OHIO	1	1	11840	3.8	450	1	3	12000	509	1	10006	379
		ILLINOIS	1	2	11890	3.8	448	1	12	11890	476	2	11015	450
		WISCONSIN	2	4	10814	4.1	443	2	8	10747	408	2	10366	415
		IOWA	4	4	8203	4.1	329	3	5	9007	400	1	9625	404
		NEBRASKA	1	2	13590	4.1	560	1	3	13370	560	2	9881	403
		KANSAS	1	1	12900	4.2	540							
		OKLAHOMA	1	1	12360	3.7	458	1	2	8770	367	1	8589	349
		WASHINGTON	1	3	11820	4.0	469	1	13	11185	464	3	11259	459
	67937	NEBRASKA	1	1	8180	4.0	326	1	19	10780	456			
		KANSAS	3	3	10207	4.3	438	1	17	8610	337	1	8960	377
		WASHINGTON	1	2	10000	3.9	390	1	15	11150	455	2	11652	465
	68351	WISCONSIN	1	1	15530	4.2	655	1	7	10470	424	1	10715	436
	68741	NEW YORK	7	15	10444	3.9	400	2	15	10633	394	2	10413	409
		INDIANA	11	12	12217	3.9	472	7	4	10872	445	1	10155	414
		ILLINOIS	7	14	11050	4.1	444	5	9	10105	410	2	10192	406
		MICHIGAN	5	11	8796	3.9	341	2	7	10831	442	5	9354	375
		WISCONSIN	2	3	7115	4.1	275	2	11	10000	404	1	10650	419
		MINNESOTA	6	7	10350	3.8	390	3	11	9507	378	1	9770	381
		IOWA	1	1	13460	3.7	492	1	3	9120	359			
		NEBRASKA	1	2	17765	3.8	663	1	6	6980	282			
		KANSAS	1	1	3310	4.5	150							
		TEXAS	1	1	14080	3.9	545	1	23	12030	469	1	7913	311
		MONTANA	2	2	11025	4.1	451	2	3	8950	400			
		IDAHO	1	2	12410	3.8	471	1	17	11570	485	1	11064	451
	70012	NEW YORK	3	4	10725	3.9	421	2	14	10795	412	1	9014	356
		PENNSYLVANIA	1	1	12690	3.9	501							
		INDIANA	16	28	12549	3.9	488	14	6	10791	422	1	10644	419

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.			
								NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	
		ILLINOIS	3	5	10443	4.0	412	3	15	10840	438	1	9669	399	
		MICHIGAN	11	25	10474	4.0	413	5	12	10819	443	2	10944	444	
		WISCONSIN	6	7	10518	3.9	402	5	15	10580	410	1	11037	417	
		MINNESOTA	2	5	16434	3.6	574	1	13	12140	442	1	11500	416	
		IOWA	1	3	12013	4.2	503								
		MARYLAND	7	9	13466	4.7	629								
		VIRGINIA	1	3	13343	3.9	521								
		NORTH CAROLINA	1	3	15643	4.1	639								
		GEORGIA	4	4	12085	3.5	419								
70409		OHIO	1	3	9020	4.4	393	1	16	10040	428	2	10192	439	
		ILLINOIS	5	12	10993	4.2	461	5	13	10625	441	1	10546	430	
		WISCONSIN	9	17	11853	4.1	480	4	13	11108	418	1	10777	415	
		IOWA	5	13	10528	4.0	424	2	21	11120	450	2	9627	467	
		TEXAS	1	1	9800	3.8	371	1	37	11770	466	1	7913	311	
70757		OHIO	1	2	10965	4.6	500								
		INDIANA	1	1	14590	4.5	651	1	6	12720	519	1	11271	465	
		ILLINOIS	1	1	10010	4.1	415	1	11	12160	492				
		WISCONSIN	2	5	8894	4.5	394	2	14	9380	373	2	10336	391	
		MINNESOTA	1	3	10190	3.7	385	1	10	10423	409	2	9892	386	
		IOWA	1	1	10740	4.5	484	1	6	8930	365	1	10758	431	
		MISSOURI	1	2	10395	5.0	518								
		SOUTH DAKOTA	1	1	10310	4.2	431								
		NEBRASKA	1	2	8345	4.6	385	1	4	11960	496	2	9652	415	
		CALIFORNIA	1	1	12420	4.7	588								
71762		IOWA	2	3	8095	4.1	331	1	16	10070	401	1	9788	387	
		MISSOURI	4	4	8813	4.4	378	4	5	9620	399	1	6660	289	
		NEBRASKA	2	3	9063	3.9	351	2	10	11020	479				
		KANSAS	2	2	12870	4.5	582								
		IDAHO	1	2	10640	3.9	419	1	9	10230	418	1	9559	401	
		WASHINGTON	1	1	10200	4.1	421								
		CALIFORNIA	1	1	12640	4.1	524								
74191		ILLINOIS	1	1	11790	4.0	467	1	21	11310	496				
		WISCONSIN	3	7	9047	3.9	355	3	14	8427	331	2	9454	375	
		MINNESOTA	1	1	6060	4.0	242	1	11	5600	227	1	7706	301	
		TEXAS	1	1	4060	3.3	134	1	4	4880	183				
75369		ILLINOIS	1	2	12985	4.8	621	1	12	13105	552	1	12415	488	
77195		ILLINOIS	2	2	8565	4.1	352	1	6	9890	415	1	9221	380	
		WISCONSIN	2	5	10624	3.9	401	2	10	9165	365	1	10159	373	
		TEXAS	1	1	3640	3.5	129	1	3	5530	210				
77775		MAINE	1	1	12050	4.2	508								
		NEW YORK	4	7	11868	4.1	482	1	12	13300	529	1	11569	436	
		NEW JERSEY	3	4	10297	4.0	415	2	4	11280	412				
		PENNSYLVANIA	1	2	11750	3.9	454								
		OHIO	3	3	9127	4.1	379	2	16	11455	492	1	11827	485	
		INDIANA	12	16	13777	4.0	549	10	5	11720	485	1	11616	474	
		ILLINOIS	1	1	10010	4.3	430	1	11	7190	278	1	10268	428	
		MICHIGAN	4	4	9593	4.3	416	1	6	7990	316	1	11228	476	
		WISCONSIN	5	6	9840	4.1	399	4	8	8550	345	1	9363	323	
		MINNESOTA	10	10	10979	4.1	446	8	5	11835	485	1	11554	461	
		IOWA	7	8	11588	4.0	464	7	22	9609	389	1	8330	352	
		NEBRASKA	2	3	13420	4.0	533	1	17	12130	473	1	12437	498	
		KANSAS	2	2	8355	4.1	340	2	14	9495	375	1	8960	377	
		MARYLAND	9	11	14048	4.2	592								
		VIRGINIA	1	1	10640	4.1	431								
		NORTH CAROLINA	2	2	6885	4.3	300	2	29	7460	302	1	7981	324	
		GEORGIA	3	6	10791	4.0	433								
		FLORIDA	1	2	10600	5.0	530								
		TEXAS	3	3	13210	3.8	506	1	37	11160	434	1	9385	360	
		IDAHO	1	2	8155	4.0	328								
		COLORADO	1	1	9480	4.1	367	1	5	11040	449	1	9974	402	
		CALIFORNIA	1	2	9720	3.9	377								
78440		MICHIGAN	1	3	12803	4.1	524	1	19	11775	493	1	12263	502	
80699		NEW JERSEY	4	4	13965	4.0	563	4	21	11950	494	1	12325	507	
		OHIO	1	1	12120	4.0	484	1	5	10320	475				
		ILLINOIS	3	5	9339	3.9	367	2	13	10250	413	1	10067	410	
		MICHIGAN	2	2	11865	4.0	474	2	13	11585	483	1	10862	439	
		WISCONSIN	2	3	9375	4.0	376	2	9	9240	352	1	9984	404	
		IOWA	3	6	9752	3.9	379	3	9	10007	403	1	9983	383	
		NEBRASKA	1	1	11280	4.0	450	1	19	10510	445				
		KANSAS	1	1	10230	3.9	399	1	9	8630	367				
		GEORGIA	1	1	12800	4.2	541								
81652		NEW JERSEY	2	4	8873	4.4	380	1	15	11905	502	2	11799	467	
		OHIO	3	3	9697	4.4	428	2	11	11425	464	1	13222	545	
		ILLINOIS	5	8	9395	4.1	385	4	12	9541	384	2	9269	377	
		MICHIGAN	4	8	12048	4.2	506	4	16	12120	495	1	12593	496	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREEO	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO		
								NO. OAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		WISCONSIN	14	21	10790	4.0	427	10	11	10497	403	1	10810	409
		MINNESOTA	9	19	10151	4.0	404	7	12	10520	414	1	9701	384
		IOWA	2	2	9555	3.9	373	2	17	11670	472	1	12067	502
		NEBRASKA	1	1	8480	3.9	331	1	19	10660	452			
		MARYLAND	2	2	12900	4.1	524					1	11510	463
		NORTH CAROLINA	1	1	6730	4.3	268	1	38	7090	291	1	7761	319
		TEXAS	1	1	7160	4.0	289	1	23	12330	480			
	82462	NEW YORK	5	5	8668	4.1	357	5	10	11842	452	1	10955	425
		NEW JERSEY	3	3	13120	4.3	563	3	15	11420	465	1	12644	515
		OHIO	1	1	15460	4.3	666	1	2	11810	473	1	10333	423
		INDIANA	1	1	3140	4.9	154					1	10115	402
		MICHIGAN	3	3	13293	4.2	560	3	8	12637	520	1	12702	516
		NEBRASKA	3	3	10983	4.6	506	3	17	10553	438			
		KANSAS	2	3	10325	5.1	526	1	29	10620	489	1	11118	476
		NORTH CAROLINA	1	1	10580	4.3	459	1	4	7900	324	1	7532	344
		GEORGIA	1	1	9490	4.3	409							
	83625	NEW YORK	1	2	10195	4.1	414	1	7	11560	453	1	10987	444
		NEW JERSEY	2	2	11380	4.2	478	2	14	9290	377	1	9821	403
		OHIO	3	3	9380	4.6	433	1	12	10090	426	1	13941	592
		INDIANA	2	2	11485	4.0	463	2	4	11010	448	1	12001	498
		ILLINOIS	1	4	13780	3.8	528	1	14	12690	510	2	12126	485
		MICHIGAN	4	5	14468	4.1	597	4	8	12715	520	1	12941	512
		WISCONSIN	11	14	10840	4.0	438	9	15	11274	443	1	11575	449
		MINNESOTA	3	6	11478	4.1	463	2	28	9548	387	2	9669	383
		NEBRASKA	2	2	10415	4.4	451	2	18	10570	445			
		VIRGINIA	1	1	11920	4.2	501	1	47	10960	482			
		NORTH CAROLINA	1	1	12590	4.1	521					1	10410	363
		GEORGIA	1	1	11380	3.7	424							
		TEXAS	1	1	12780	3.6	466	1	37	11690	463	1	7913	311
		IDAHO	1	1	4840	4.6	222							
	87681	NEW YORK	2	2	6975	4.0	277	1	6	11770	487	1	12415	481
		NEW JERSEY	3	3	12227	4.3	519	3	16	12183	500	1	12720	520
		OHIO	1	1	8070	4.3	347	1	16	10460	423	1	10333	407
		ILLINOIS	4	7	8146	4.2	337	4	11	10331	412	1	8858	356
		MICHIGAN	4	5	11428	4.5	509	4	10	11545	481	1	12083	494
		WISCONSIN	6	8	8912	4.2	375	5	11	9446	380	1	10415	377
		MINNESOTA	6	10	9814	4.4	432	5	12	9833	388	1	9390	370
		GEORGIA	1	1	8510	4.7	400							
		FLORIDA	1	1	11900	3.3	389							
		TEXAS	2	2	12545	3.9	483	2	30	11905	468	1	7913	311
		IDAHO	1	1	7330	4.6	337							
		COLORADO	2	2	10680	4.6	483	2	4	11930	473	1	10900	439
		CALIFORNIA	1	1	13060	4.6	598							
	91609	MASSACHUSETTS	11	29	13994	4.3	598							
		MICHIGAN	1	1	14840	4.8	716	1	23	11790	498	1	12263	524
		NEBRASKA	1	1	12300	4.5	551					1	10867	432
		KANSAS	2	2	10300	4.4	459	2	6	9770	407	1	10497	480
	99988	IOWA	9	11	10497	4.0	426	8	12	13338	550	1	13999	601
		NEBRASKA	6	10	10620	4.1	434	3	3	10307	425	1	10137	405
		COLORADO	1	3	7527	4.3	326	1	4	11450	481	1	9821	429
M. SH	7858	OHIO	1	1	7190	3.6	261	1	9	7370	276	1	8578	331
		MISSOURI	1	1	11600	3.7	427							
		WASHINGTON	1	1	12020	3.6	432							
	40145	MISSOURI	2	2	8860	4.0	351	2	16	10190	424	1	8813	354
	48787	INDIANA	1	1	8760	4.3	374	1	1	8120	307			
		MICHIGAN	2	2	11185	3.8	423							
		IOWA	1	1	7070	3.9	276	1	1	10720	392			
		MISSOURI	1	1	10330	3.6	394	1	5	9140	335	1	9799	383
		KANSAS	2	2	10915	3.9	422							
	85779	MINNESOTA	3	3	7597	3.4	251	2	2	8000	267	1	7968	286
	183198	WASHINGTON	6	16	9252	4.0	368	2	29	10033	391	2	10110	399
	2437791	MICHIGAN	1	1	7320	4.5	329	1	14	8750	417			

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LBS.	TEST PCT.	FAT LBS.	305-DAY NO. DAUS.	CONTEMPORARY RECOROS NO.	MILK LBS.	AV. FAT LBS.	YEARLY RECOROS NO.	HERO MILK LBS.	AV. FAT LBS.	
000	GUER	237407	WISCONSIN IOWA	2 1	4 1	6900 8000	5.2 5.0	357 398								
	HOL.	667753	MINNESOTA MARYLAND	3 1	12 5	12813 10882	3.3 3.3	429 356								
		731051	MINNESOTA	1	4	12893	3.2	409	1	4	11303	418				
001	AYR.	104173	MINNESOTA	4	6	12731	4.0	500	4	10	10969	438	2	10045	440	
		106696	MAINE CONNECTICUT NEW YORK PENNSYLVANIA ILLINOIS	1 1 1 1 1	1 1 1 1 1	7050 5750 12160 11490 7590	3.6 4.4 4.0 4.0 3.9	256 252 487 464 293	1 1 1 1 1	3 3 21 21 4	6140 238 9340 12310 8390	238 360 444 372	1 1 1 1 1	8524 8905 9123 13233	319 400 359 484	
	GUER	223617	MINNESOTA	15	48	6856	5.0	342	10	7	8098	380	2	7689	370	
		234517	MINNESOTA KANSAS	2 1	4 1	7083 7440	5.8 4.8	409 354								
		281673	MINNESOTA	6	9	7059	4.9	347								
		291023	MINNESOTA	10	36	7134	5.1	358	8	11	8477	374	2	7942	369	
		297409	MINNESOTA	2	10	8110	4.8	388	2	15	7718	360	5	7000	323	
		311994	MINNESOTA	8	16	7131	4.9	350	1	4	8287	304	3	9014	351	
		313997	MINNESOTA IOWA NORTH OAKOTA	63 1 2	147 2 6	7641 7825 8485	4.9 5.3 4.9	368 409 411	58 1 2	10 9 7	8610 9865 7245	392 430 366	2 2 2	8185 8464 8249	381 404 405	
		316080	MINNESOTA NORTH OAKOTA	37 1	95 1	6801 3040	5.1 3.8	348 116	31	10	8263	379	2	8239	386	
		320002	MINNESOTA NORTH OAKOTA	22 1	40 4	8481 8973	4.8 4.1	409 363	20	7	8729	422	2	8860	440	
		324370	MINNESOTA	2	9	5825	4.4	259	2	7	7674	322	1	7848	323	
		325370	WISCONSIN	1	1	7000	4.1	285								
		331114	MINNESOTA	43	81	7513	4.9	365	40	9	8594	389	2	8422	380	
		332065	WISCONSIN MINNESOTA	1 6	1 18	6530 7134	4.4 4.7	285 331		6	6	7142	353	2	6756	337
		332645	MINNESOTA	3	9	7327	4.5	330	1	9	7353	357	1	7946	373	
		339328	MINNESOTA NORTH OAKOTA	39 1	84 3	7806 7660	4.8 4.9	369 373	37 1	8 3	8797 8517	399 396	2 2	8114 7407	376 352	
		357746	MINNESOTA NORTH OAKOTA	23 1	44 3	6924 9167	5.2 5.8	359 526	20 1	8 5	8366 8633	402 429	2 2	8276 7685	397 384	
		363763	MINNESOTA IOWA	4 1	8 2	8808 6770	5.3 5.3	458 362	4 1	9 7	9154 8620	419 436	2 2	9616 8649	446 445	
		369733	WISCONSIN MINNESOTA IOWA NORTH OAKOTA	2 79 2 6	8 137 3 8	6850 7369 8853 5898	5.3 5.2 4.5 5.2	363 380 380 313	74 2 5	10 11 5	8559 10323 7946	394 441 323	2 2 1	8256 10554 9320	390 459 399	
		382936	MINNESOTA IOWA NORTH DAKOTA	158 5 6	362 7 14	7701 7567 7110	5.1 5.3 5.3	390 398 371	149 5 4	9 10 7	8607 9111 8857	389 403 388	2 1 2	8396 9114 8601	391 401 379	
		400003	MINNESOTA IOWA NORTH OAKOTA	24 4 2	25 5 2	6962 6485 8960	5.0 5.4 4.3	348 343 379	21 4 1	11 10 10	8520 8881 10140	402 384 373	1 1 1	8585 8411 9538	411 387 401	
		403571	MINNESOTA IOWA NORTH OAKOTA	101 7 7	170 13 13	7420 7194 7712	4.8 4.9 4.9	352 355 374	97 5 6	9 5 9	8695 9833 10008	408 426 438	2 1 1	8566 8701 8770	406 387 404	
		403587	MINNESOTA	12	19	7725	4.8	364	12	9	8552	397	2	8034	368	
		423077	MINNESOTA NORTH OAKOTA	3 1	4 2	9040 7015	4.9 5.0	423 344	3 1	9 11	9358 10865	428 403	1 2	9953 9832	439 407	
		447733	MINNESOTA	6	8	5993	5.2	309	6	16	8160	400	1	8361	396	

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
	454429	MINNESOTA NORTH DAKOTA	1 1	1 1	8330 9020	5.1 4.4	427 394	1	1	8110	461	1	7881	413
	458101	MINNESOTA IOWA NORTH DAKOTA MARYLAND	7 1 1 1	8 1 1 1	7461 6180 6460 3670	4.6 4.7 4.7 4.0	341 292 304 148	6 1 1	8 7 1	9518 10580 7130	398 450 353	1 1 1	9496 9603 8775	405 446 388
	458451	MINNESOTA	1	1	9400	4.0	379	1	6	10960	440	1	10464	423
	477995	MINNESOTA	2	2	8100	4.6	371	1	16	7740	364			
	514132	MINNESOTA	1	1	10460	4.9	509	1	20	8250	410			
HOL.	728970	NEW YORK MINNESOTA	1 7	1 21	10950 11175	3.1 3.5	340 383							
	739097	NEW YORK WISCONSIN MINNESOTA IOWA MISSOURI NORTH DAKOTA NEBRASKA	1 1 391 6 1 13 1	1 1 1076 17 3 42 4	9620 10510 11008 12194 11367 10465 10428	3.5 3.6 3.6 3.9 3.9 3.7 3.9	333 381 397 460 442 387 409							
	787503	WISCONSIN MINNESOTA	2 2	9 2	11623 13850	3.7 3.2	434 443							
	791874	MINNESOTA IOWA NORTH DAKOTA	104 1 7	235 1 21	12358 15350 12162	3.5 3.3 3.4	429 504 417	98 1 6	14 7 54	11846 12590 10834	424 435 385	2 3	11742 11185	421 400
	796309	MINNESOTA NORTH DAKOTA NEBRASKA	89 1 1	200 1 2	10976 10440 16050	3.6 3.7 3.4	398 384 534	56 1 1	12 26 7	12044 12740 13295	432 486 455	2 2	11755 13631	424 476
	801058	MINNESOTA	1	1	9000	3.5	311							
	802587	PENNSYLVANIA MINNESOTA IOWA	1 28 1	2 91 6	9000 11609 12147	3.6 3.5 3.9	324 408 468							
	826120	MINNESOTA NEBRASKA	38 1	124 3	11634 8833	3.5 3.8	403 339	22	11	11569	412	2	11512	406
	829732	OHIO MICHIGAN MINNESOTA KANSAS	1 1 72 1	1 1 258 3	8460 19070 11335 14190	3.9 3.8 3.6 3.6	334 721 409 503							
	831321	PENNSYLVANIA MICHIGAN MINNESOTA IOWA NORTH DAKOTA SOUTH DAKOTA KANSAS	1 1 570 11 59 2 2	1 2 1114 21 136 4 2	12220 9970 11486 13057 10978 16910 11760	3.6 4.1 3.6 3.6 3.7 3.9 4.0	440 391 409 473 407 649 464	1 1 548 11 59 2 1	1 8 13 7 37 3 32	6630 12520 11944 12669 12078 13493 12550	223 412 423 453 424 564 510			
	832235	VERMONT NEW YORK PENNSYLVANIA MARYLAND	2 150 1 1	4 399 1 1	10415 10621 10260 12880	3.9 3.7 3.7 3.2	407 388 379 407							
	838719	MINNESOTA	2	5	13485	3.4	446	2	16	12467	444	2	12538	426
	852929	MINNESOTA	11	34	11435	3.6	412	8	7	11583	423	2	11092	394
	858839	NEW JERSEY WISCONSIN MINNESOTA IOWA NORTH DAKOTA NEBRASKA	1 1 44 4 1 1	1 2 135 9 2 2	11350 5060 11200 13488 14035 9605	3.4 3.3 3.5 3.6 3.7 3.5	390 162 396 489 515 327							
	878276	WISCONSIN MINNESOTA IOWA NORTH DAKOTA KANSAS	1 698 39 59 2	1 1252 65 104 2	2300 12064 12118 12817 14435	3.6 3.5 3.5 3.5 3.5	82 418 420 441 495	1 671 39 52	4 12 7 33	14180 12102 12592 12338	471 430 441 434	1 2 2 1	13756 11918 12294 11802	485 427 438 421
	881770	MINNESOTA	2	7	9040	3.6	318	1	13	11240	389	1	11674	388
	886818	MINNESOTA IOWA NORTH DAKOTA	57 12 3	86 13 6	11304 11962 12602	3.7 3.8 3.7	417 447 460	55 12 3	13 8 34	12234 13481 11666	431 504 412	1 1 2	12204 12123 11700	431 473 410

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
	898064	MINNESOTA	4	5	10859	3.8	407							
	898622	MINNESOTA	100	161	11528	3.8	439	98	15	12001	424	2	12201	439
		IOWA	9	18	11989	3.7	436	9	8	12520	425	2	12679	430
		NORTH DAKOTA	13	27	12556	3.9	482	13	35	12323	430	1	11564	419
	921321	MINNESOTA	21	51	11520	3.6	411	20	10	11472	424	2	11492	413
		IOWA	1	2	11035	4.2	459	1	7	13760	507	2	12328	459
	921325	MINNESOTA	3	10	12198	3.4	416	2	6	12031	441	2	11917	456
	944770	MINNESOTA	172	342	12179	3.4	411	168	13	12068	431	2	11918	426
		IOWA	4	6	12671	3.3	409	4	10	11931	409	2	11909	405
		NORTH DAKOTA	8	24	12452	3.5	426	8	18	11435	412	3	11151	395
		NEBRASKA	1	3	16370	3.6	588	1	6	13733	476	3	14236	511
	950648	CONNECTICUT	1	1	12590	3.6	459	1	28	10760	404	1	13374	510
		PENNSYLVANIA	1	4	10760	3.4	363	1	5	11658	417	2	11440	415
		OHIO	1	1	12040	3.4	405	1	4	12430	448			
		INDIANA	1	3	12987	3.6	463	1	1	12030	417	3	10711	376
		ILLINOIS	2	11	13756	3.4	466	2	8	13134	474	3	12451	449
		MICHIGAN	1	2	10215	3.7	381	1	14	14575	525	2	14546	525
		WISCONSIN	249	589	12501	3.4	426	221	12	12425	443	2	12247	436
		MINNESOTA	1	3	11453	3.5	404	1	16	12690	451	3	12175	446
		IOWA	2	6	13702	3.4	460	2	6	13832	487	3	13679	506
		MISSOURI	1	3	13247	4.3	569	1	2	11073	338	2	13451	501
		NEBRASKA	2	6	9374	3.7	343							
		MARYLAND	1	1	10420	3.7	388	1	53	13070	494	1	12579	451
		WEST VIRGINIA	1	1	12460	3.8	476							
		GEORGIA	1	1	7480	3.6	270							
		TENNESSEE	1	1	9090	3.8	346							
		TEXAS	3	7	14493	3.4	488	2	21	13370	486	3	13240	498
	964841	MINNESOTA	132	292	11220	3.7	410	111	10	11105	397	2	11005	393
		IOWA	2	7	13214	3.9	511	1	4	14070	502	3	13651	498
		NORTH DAKOTA	2	2	9770	4.0	392	2	9	12115	428	1	10491	362
	968816	MINNESOTA	45	61	10719	3.6	378	42	20	12107	438	1	11511	424
		NORTH DAKOTA	6	10	13918	3.4	465	6	70	12818	439	1	12880	446
	969897	PENNSYLVANIA	1	1	11210	4.3	485							
		MINNESOTA	508	1187	11756	3.5	415	479	11	11881	423	2	11633	416
		IOWA	21	55	12165	3.7	442	19	6	12281	441	2	11844	436
		NORTH DAKOTA	28	91	12915	3.5	447	27	33	11507	406	3	11206	395
		SOUTH DAKOTA	1	3	11050	3.2	354	1	3	12977	476	2	12066	401
		NEBRASKA	2	5	10672	3.5	369	1	5	13230	464	3	14534	516
		COLORADO	1	2	10150	3.5	352							
	969938	MINNESOTA	493	918	11557	3.5	401	468	13	12073	430	2	11950	428
		IOWA	22	45	12360	3.5	425	22	9	11835	420	2	12031	429
		NORTH DAKOTA	24	47	11543	3.5	398	22	21	11821	423	2	12190	408
		NEBRASKA	3	5	13242	4.1	540	2	7	13689	525	2	13706	502
		KANSAS	2	3	11383	3.8	426							
	983075	OHIO	1	1	12320	3.3	403	1	20	9350	320	1	8611	293
		MINNESOTA	72	122	11507	3.5	406	59	16	11892	422	2	11964	428
		IOWA	7	12	14000	3.6	501	5	5	12077	430	1	11506	417
		NORTH DAKOTA	3	8	11359	3.6	403	3	60	11431	415	2	11685	423
	989718	MINNESOTA	507	887	11794	3.6	418	484	15	12064	428	2	11914	426
		IOWA	39	68	12420	3.5	432	33	9	12803	445	2	12578	441
		NORTH DAKOTA	56	112	12037	3.5	422	55	29	12385	437	2	11714	416
		SOUTH DAKOTA	2	2	12895	3.7	470	2	19	10970	395	1	11337	397
		NEBRASKA	1	1	7880	3.2	255	1	12	7440	260			
		WASHINGTON	1	1	12330	3.4	420	1	22	14340	504	1	15402	542
	990952	WISCONSIN	1	1	13440	3.4	461	1	10	9710	392	1	11881	451
		MINNESOTA	270	349	12547	3.5	439	262	19	12754	454	1	12135	451
		IOWA	20	23	11919	3.5	415	17	11	13130	461	1	12529	453
		NORTH DAKOTA	27	30	13711	3.6	491	27	26	13289	481	1	12822	465
		SOUTH DAKOTA	1	1	13480	3.7	493					1	11827	422
		IDAHO	5	8	14396	3.7	523							
	999636	MINNESOTA	48	109	13162	3.5	463	38	12	12173	433	2	12248	435
		IOWA	1	5	11910	3.3	389	1	5	8645	358	4	9004	372
		NORTH DAKOTA	3	3	12017	3.6	428	3	11	12003	421	1	11707	414
	1003960	MINNESOTA	141	197	12048	3.6	438	132	18	12370	440	1	12050	443
		IOWA	1	1	13580	3.5	480	1	7	9950	355			
		NORTH DAKOTA	11	20	13001	3.5	452	11	43	12603	434	1	12397	440
		IDAHO	6	16	13267	3.6	480							
	1004966	MINNESOTA	119	162	12557	3.4	423	111	20	12478	446	1	12226	443
		IOWA	3	4	12465	3.3	411	3	8	13092	461	2	12007	425
		MISSOURI	1	1	12710	3.9	496	1	52	9780	378			

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPDRARY				YEARLY HERD			
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	
		NORTH DAKOTA	13	16	13414	3.4	453		13	44	12337	433	1	11917	412
	1021010	NEW YORK	1	2	9845	3.7	359	1	47	10960	390	2	10677	374	
	1038986	MINNESOTA	66	93	12248	3.8	461	64	22	12923	462	1	12466	461	
		IOWA	7	8	13358	3.6	480	7	11	13774	474	1	14184	499	
		NORTH DAKOTA	3	4	12685	3.7	468	3	10	12680	465	1	12603	462	
		SOUTH DAKOTA	1	1	16340	2.9	475	1	21	12700	372	1	10769	364	
	1048545	WISCONSIN	2	4	10917	3.7	406								
		MINNESOTA	8	8	10894	3.7	409	7	30	11576	426	1	11440	420	
		IOWA	2	2	15070	3.7	555	2	9	14280	495	1	14203	485	
	1052587	MINNESOTA	24	38	11318	3.7	415	17	9	11550	425	2	11112	414	
	1058067	MINNESOTA	25	35	10733	3.7	392	16	13	13343	467	2	13294	467	
		NORTH DAKOTA	2	4	8614	3.8	330	2	48	11960	419	1	11189	408	
		SOUTH DAKOTA	1	1	10560	3.8	398	1	25	8570	298	1	9777	343	
	1064113	WISCONSIN	1	1	9220	3.7	341								
		MINNESOTA	79	104	13449	3.5	464	75	23	13063	466	1	12583	465	
		IOWA	3	5	17324	3.2	549	3	12	13985	509	2	13477	522	
		SOUTH DAKOTA	1	1	3820	3.4	127	1	5	11930	376	1	11478	405	
		NEBRASKA	1	2	12275	3.5	434	1	11	12805	493	1	12230	464	
	1064738	WISCONSIN	1	1	9630	3.8	363	1	29	10860	393	1	11183	425	
		MINNESOTA	122	165	12353	3.6	442	114	21	12337	441	1	11940	440	
		IOWA	15	19	13285	3.7	482	14	10	12641	455	1	12913	452	
		NORTH DAKOTA	10	13	13488	3.7	489	10	43	11951	423	1	11493	419	
	1072328	MINNESOTA	185	245	13013	3.6	465	179	27	12965	466	1	12190	460	
		IOWA	7	10	11556	3.5	395	7	11	13002	454	1	11459	430	
		MISSOURI	1	1	15200	3.3	501	1	1	11290	400				
		NORTH DAKOTA	16	22	13827	3.6	496	13	48	13316	465	1	12228	427	
		SOUTH DAKOTA	2	4	11975	3.3	392	2	53	13698	477	2	11842	481	
	1079866	MINNESOTA	27	58	11825	3.7	434	26	26	12159	431	2	12010	430	
		IOWA	2	4	12440	3.5	434	2	8	13112	483	2	13231	467	
		NORTH DAKOTA	3	5	11808	3.5	412	2	50	12299	436	2	11682	416	
	1082290	MINNESOTA	1	1	12640	3.7	471	1	16	13420	461	1	13898	470	
	1092428	MINNESOTA	227	309	11921	3.6	423	213	16	12218	434	1	12014	436	
		IOWA	8	9	12161	3.5	425	8	8	13119	466	1	11652	396	
		NORTH DAKOTA	19	27	12283	3.7	456	18	25	12318	444	1	11379	443	
		SOUTH DAKOTA	1	3	5753	3.3	188	1	19	8820	312	3	7827	381	
		KANSAS	1	1	9930	3.7	372								
	1102400	MINNESOTA	63	105	12467	3.5	434	54	20	12230	434	2	12135	435	
		IOWA	2	4	9990	3.4	337	1	7	12930	457	1	12208	464	
		NORTH DAKOTA	5	8	13722	3.5	477	5	41	10648	394	1	10829	413	
	1102655	MINNESOTA	13	16	9852	3.6	354	10	16	11928	429	1	11289	407	
		NEBRASKA	1	1	9380	3.6	338	1	9	8600	345	1	11576	441	
	1107908	MINNESOTA	16	21	11513	3.6	413	15	22	11120	409	1	10635	399	
		NORTH DAKOTA	2	3	11730	3.8	440	2	11	12743	447	2	11838	419	
	1115040	MINNESOTA	4	5	12401	3.6	450	3	20	11813	437	1	11612	420	
	1116800	WISCONSIN	2	2	13135	3.5	447	2	22	11130	396	1	11183	425	
		MINNESOTA	53	67	13958	3.6	500	51	26	12782	458	1	11865	449	
		IOWA	1	1	15010	3.3	497	1	15	14530	493	1	12960	462	
		NORTH DAKOTA	3	4	11947	3.4	396	3	49	11730	414	1	11069	398	
	1117014	MINNESOTA	82	115	12123	3.6	438	81	16	12459	444	1	12052	446	
		IOWA	7	7	12203	3.4	417	6	7	12480	429	1	13045	454	
		NORTH DAKOTA	11	14	13944	3.6	495	10	42	13012	465	1	12422	453	
		SOUTH DAKOTA	1	1	11560	4.2	488	1	2	13180	508	1	13004	509	
	1118704	MINNESOTA	13	16	11073	3.6	391	12	16	12521	438	1	12326	425	
		IOWA	2	2	11345	3.6	400	2	9	14045	477	1	11162	401	
		SOUTH CAROLINA	1	1	9090	3.7	335	1	102	9910	368	1	9941	364	
	1129193	MINNESOTA	18	25	12815	3.5	448	18	19	11872	424	1	11687	423	
		IOWA	11	27	13620	3.4	458								
	1140661	MINNESOTA	1	1	12290	4.0	490	1	35	13030	441	1	12927	446	
		NORTH DAKOTA	1	1	9920	3.7	371	1	12	11260	394	1	10562	373	
	1152211	WISCONSIN	1	2	10670	3.6	389	1	13	11250	398	2	11102	413	
		MINNESOTA	51	65	12572	3.6	454	46	27	12807	457	1	12007	450	
		IOWA	6	6	12328	3.5	436	5	8	14244	497	1	12873	467	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LBS.	TEST PCT.	FAT LBS.	305-DAY CONTEMPORARY AV.				YEARLY HERO		
								NO. OAUS.	RECORDS NO.	MILK LBS.	FAT LBS.	RECORDS NO.	MILK LBS.	FAT LBS.
		NORTH DAKOTA	8	11	12594	3.7	455	7	8	12840	457	1	12801	456
	1153646	MINNESOTA	25	29	12648	3.5	439	20	18	12610	458	1	13264	472
		IOWA	2	2	13660	3.6	486	2	13	14815	534	1	14623	499
		NORTH DAKOTA	3	3	13963	3.5	497	3	10	14437	504	1	13647	488
	1167510	ILLINOIS	1	1	16180	3.2	512	1	5	10380	384			
		MINNESOTA	88	89	13706	3.7	506	84	15	13172	475	1	12959	472
		IOWA	3	3	14523	3.5	504	3	9	13273	463	1	13491	486
		NORTH DAKOTA	2	2	11845	3.8	453							
		SOUTH DAKOTA	3	4	17062	3.7	623	3	5	16010	553	1	13407	450
	1195742	MINNESOTA	7	11	10280	3.6	368	7	17	10753	389	2	10279	412
		IOWA	3	5	10872	3.5	387	3	13	12485	454	2	11627	453
		SOUTH DAKOTA	1	1	11890	3.5	421	1	16	13380	425	1	10900	363
	1196469	MINNESOTA	6	7	12252	3.7	457	6	15	13204	474	1	12906	465
	1252329	MINNESOTA	1	2	13780	3.8	521	1	227	13740	504	2	7243	490
	1274251	MINNESOTA	1	1	10890	3.9	428	1	14	11640	410	1	11761	416
JER.	408305	MINNESOTA	2	9	7500	5.2	374							
	410962	WISCONSIN	16	35	6799	5.5	370	9	8	7427	398	2	7329	397
		MINNESOTA	36	84	7312	5.5	401	19	7	8164	420	2	7726	399
		IOWA	3	5	5829	6.0	346	3	9	7470	386	1	6464	363
		NORTH DAKOTA	1	1	7420	6.1	455	1	5	6490	371			
	412750	MINNESOTA	12	44	7496	5.1	381	4	11	7896	401	2	7469	378
		IOWA	1	3	7667	6.0	460	1	7	7427	427	2	6835	399
		WASHINGTON	1	7	10820	4.6	495	1	3	8963	534			
	439930	WISCONSIN	1	1	6320	5.5	347	1	16	7250	376			
		MINNESOTA	58	143	7178	5.3	374	28	9	7845	410	2	7662	409
		IOWA	2	5	5592	5.9	331	2	14	8130	452	2	6553	382
		NORTH DAKOTA	1	1	4530	6.3	286	1	5	7060	405			
	454623	MINNESOTA	5	5	6410	5.2	334	2	13	8060	440	1	7521	410
	465708	WISCONSIN	1	1	9110	4.6	423	1	13	9790	505	1	8644	451
		MINNESOTA	22	33	8037	5.3	424	16	12	7892	411	2	7556	407
		IOWA	1	2	12645	4.1	512							
		SOUTH DAKOTA	1	1	7540	6.4	484	1	6	8120	522	1	8175	476
	470985	MINNESOTA	27	73	7966	5.2	409	17	8	7917	419	3	7820	424
		IOWA	1	3	4660	5.7	262	1	7	8235	489	1	7619	451
	474826	WISCONSIN	1	2	8625	5.6	478							
		MINNESOTA	18	27	7464	5.3	389	16	15	7744	400	1	7714	402
		IOWA	2	6	7735	5.6	431	2	13	8025	414	2	6671	372
		SOUTH DAKOTA	1	1	10200	4.7	475	1	5	8430	480	1	8219	460
		IDAHO	3	6	7695	5.2	399							
		WASHINGTON	40	101	9107	5.4	488	16	15	8311	438	1	8415	443
	484657	MINNESOTA	19	28	6553	5.4	348	14	12	7359	383	2	7312	375
	497204	MINNESOTA	2	2	6320	5.4	341							
	519826	WISCONSIN	1	2	6785	4.6	311	1	30	6680	375	1	7695	405
		MINNESOTA	18	33	8035	5.4	423	15	14	8282	436	1	7160	405
	539737	MINNESOTA	14	25	7846	5.3	413	13	23	7995	420	1	8394	434
		IOWA	6	10	7492	5.6	412	6	12	8150	424	1	6464	363
		NORTH DAKOTA	2	2	5235	5.4	282	2	11	6980	284			
		SOUTH DAKOTA	1	1	8750	5.4	471	1	5	8470	469	1	8578	451
8. S.	48668	MINNESOTA	9	19	9944	3.9	383	2	7	10210	402	1	9102	353
		SOUTH DAKOTA	2	4	9845	3.6	355	1	3	4510	160			
	51694	WISCONSIN	1	1	11070	4.6	510	1	1	10080	441			
		MINNESOTA	23	35	9591	4.0	376	9	8	11166	448	1	10330	408
		IOWA	1	1	12050	3.9	465	1	15	10710	449			
		MISSOURI	1	1	7320	4.2	310	1	1	8380	364			
		NORTH DAKOTA	5	9	7677	3.9	295	3	9	10413	442	1	10726	420
	55722	WISCONSIN	2	4	11519	3.6	413							
		MINNESOTA	13	27	10243	4.0	410	10	8	10289	410	2	9198	376
		IOWA	7	12	8903	4.2	370	2	10	10090	424	1	9385	410
		MISSOURI	1	3	9757	4.5	421	1	1	7900	386	2	9522	413
		NORTH DAKOTA	3	4	11067	3.6	396	1	5	10670	391	2	9941	377
		TEXAS	1	1	6800	4.0	273							

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONT. NO.	TEMPORARY MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
	70221	MINNESOTA	29	49	8728	4.1	353	21	12	10445	419	2	9698	394
		IDA	4	4	8915	4.6	396	3	4	10010	391	1	10442	398
		NORTH DAKOTA	5	6	8026	4.2	332	4	12	11905	473	1	8852	353
		MONTANA	1	2	7605	4.5	337							
	71763	MINNESOTA	31	60	9962	4.2	415	19	15	10802	435	2	9394	422
		IOWA	1	1	9780	4.1	403							
		NORTH DAKOTA	3	7	9776	4.1	400	3	7	9557	379	2	9038	359
	71866	ILLINOIS	1	1	8630	4.3	372	1	13	10470	447	1	9352	386
		WISCONSIN	17	26	10297	4.1	423	16	8	10300	424	1	10614	427
		IOWA	1	1	8740	4.2	369					1	8448	340
		NORTH DAKOTA	4	7	9281	4.2	375	2	23	11215	473			
	78960	MINNESOTA	26	49	10306	4.1	416	19	17	10357	428	2	9732	408
		IOWA	6	10	10786	3.8	409	6	9	11041	418	1	10412	396
		NORTH DAKOTA	2	3	10250	4.0	402	2	11	10280	417	1	5892	400
		NEBRASKA	2	2	11395	4.3	488	2	5	11855	460	1	12818	525
	79318	MINNESOTA	1	3	13580	3.7	503	1	23	12913	520	2	11064	433
		NORTH DAKOTA	1	1	11290	3.7	417							
	85031	MINNESOTA	13	25	12300	4.1	500	10	19	10066	413	2	8909	397
		IOWA	4	11	12453	3.9	482	3	10	10780	404	2	10148	412
		NORTH DAKOTA	3	3	11457	3.9	439	2	7	11075	445	1	10104	403
	85637	MASSACHUSETTS	1	3	13340	4.3	567	1	10	14960	597	1	13069	554
		MINNESOTA	52	86	10019	4.0	401	38	9	10197	409	2	9838	409
		IOWA	1	2	10565	4.0	423	1	3	9895	411	1	8230	360
		NORTH DAKOTA	6	11	9417	4.0	374	5	7	10269	429	2	9233	397
	92099	NEW JERSEY	1	3	10473	3.6	373	1	58	10545	418	1	10431	435
		PENNSYLVANIA	1	2	5720	3.3	190							
		INDIANA	1	1	13120	4.0	519							
		MICHIGAN	2	4	12249	3.7	452							
		WISCONSIN	22	33	10823	3.8	415	19	12	10653	429	2	10911	435
	92222	MICHIGAN	1	2	9750	3.9	380							
		MINNESOTA	8	12	9625	4.1	393	5	10	10848	423	2	9265	417
	95997	MINNESOTA	8	9	8884	4.2	376	6	11	11712	467	1	10802	435
		IOWA	3	6	10726	3.6	384	3	12	11778	447	1	10704	397
	96076	MINNESOTA	5	7	10278	3.9	404	4	21	10015	397	1	9112	392
		IOWA	2	2	14665	3.9	560	2	12	12810	487	1	12491	514
		NORTH DAKOTA	1	1	11150	4.8	533	1	9	11670	456			
		NEBRASKA	1	2	9915	3.8	372	1	4	8075	297	2	8426	335
	96156	MONTANA	1	1	8660	5.0	430							
		OREGON	1	1	10150	4.1	418	1	68	10620	455	1	10083	445
	104152	INDIANA	1	1	9760	4.2	406	1	9	12010	412	1	12808	497
		ILLINOIS	32	55	10693	4.1	441	20	8	11824	485	2	11162	453
		MINNESOTA	2	2	9865	4.0	388	2	11	11295	416	1	10650	415
		NORTH DAKOTA	2	2	6115	4.0	243							
	104182	MARYLAND	7	8	10066	4.3	429	2	21	11335	438	1	10711	394
		VIRGINIA	1	1	10050	4.0	406							
	106065	MINNESOTA	10	17	10670	4.0	428	7	15	11129	446	2	8836	426
		IDA	1	1	14190	4.0	563	1	5	9610	397	1	11347	446
	107172	MINNESOTA	5	5	10506	4.2	441	3	13	8437	335	1	11202	442
		IOWA	1	1	9120	4.0	363	1	1	11430	387	1	11325	446
	114128	MINNESOTA	5	5	12274	3.8	467	4	8	10513	391	1	10196	408
		IOWA	1	1	13870	3.9	546	1	12	9890	414	1	10148	428
M. SH	304	WISCONSIN	1	6	8938	4.0	360							
		MINNESOTA	1	6	8702	3.9	340							
	5186	MINNESOTA	7	13	7133	3.6	258	3	1	8915	354	1	7812	304
	7786	MINNESOTA	7	12	7544	4.1	304	5	6	8426	333	2	7354	294
		NORTH DAKOTA	1	1	8280	3.9	325	1	7	10040	382	1	9036	362
	8335	MINNESOTA	2	4	7228	4.6	331	2	8	8453	340	2	7175	286
	8647	MINNESOTA	4	4	7693	4.4	326	3	5	8613	324	1	8056	314
	16876	MINNESOTA	1	3	7250	4.0	292							
	22559	MINNESOTA	7	11	7201	4.1	294	7	6	8169	314	1	6979	272

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAS.	CONTEMPORARY NO. RECORDS.	AV. MILK LB.	FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
	25722	MINNESOTA	1	1	7930	4.1	327	1	18	8880	400	1	8840	393
	26666	MINNESOTA	1	1	4630	4.2	192	1	18	9060	408	1	8796	403
	29887	MINNESOTA	7	14	8711	3.9	336	4	6	8070	331	1	7028	295
	33946	MINNESOTA	1	1	7420	3.9	286	1	8	11310	416	1	9832	362
	73902	MINNESOTA	3	7	7288	4.0	286	2	3	8789	345	3	7410	292
	111053	IOWA NEBRASKA	1 4	1 4	10990 8313	3.6 4.1	396 342	3	2	8080	315	1	7946	308
	124372	MINNESOTA	1	2	10605	3.7	393	1	8	10960	404	2	10557	387
	128075	IOWA	4	5	11381	3.9	453	3	2	8547	331	1	8707	335
	2129392	MINNESOTA	1	3	7807	3.9	302	1	7	7457	291	2	6273	246
	2146013	MINNESOTA	5	9	8286	4.1	336	4	4	8538	343	2	7440	293
	2422178	MINNESOTA NORTH DAKOTA	10 1	15 1	7964 9310	4.1 4.0	322 376	10 1	8 14	8742 9420	342 355	2 1	7188 9091	284 347
002 GUER	330785	MINNESOTA	1	5	7848	4.8	374	1	9	8720	406	5	7654	353
	340809	ILLINOIS MINNESOTA NORTH DAKOTA	1 54 1	2 149 4	14425 7581 7620	4.7 4.7 5.0	673 357 383	1 43	99 9	10820 7845	525 370	1 2	11914 7685	588 373
HOL.	621423	MINNESOTA	25	93	11536	3.4	396	9	7	12464	453	2	12078	443
	716446	MINNESOTA	16	58	11633	3.4	393	6	7	12201	427	2	12398	442
	724816	MINNESOTA	169	466	11482	3.6	411	47	8	11960	430	2	11822	425
	725177	MINNESOTA	1	6	12448	3.7	429	1	5	12900	489			
	731048	MINNESOTA	35	122	11413	3.4	391	18	11	11906	421	2	11421	402
	739980	MINNESOTA	33	67	10412	3.6	366	1	11	11140	413	1	10987	398
	741679	MINNESOTA VIRGINIA TEXAS	22 1 1	59 1 2	12375 14240 15625	3.4 3.9 3.2	420 557 499	5 1	17 4	11822 11400	423 407	3 2	10537 10263	385 395
	742590	MINNESOTA IOWA	60 1	177 1	12061 11850	3.6 3.7	431 436	16	8	11691	426	2	11076	400
	743690	ILLINOIS MINNESOTA IOWA MISSOURI	1 39 2 1	2 100 7 1	10810 11222 8963 8630	3.5 3.5 3.7 3.5	382 394 326 299	7	6	11374	410	2	11629	421
	745234	MINNESOTA IOWA	22 1	78 5	11344 12650	3.4 3.5	380 441	6 1	6 6	12103 9570	420 336	3	12091	418
	748230	MINNESOTA IOWA	121 2	339 2	11004 10170	3.7 3.9	401 396	38	7	11798	426	2	11593	420
	749001	MINNESOTA	5	14	11332	3.5	395	3	6	11173	399	2	11037	398
	752123	MINNESOTA	1	1	17390	3.2	564	1	17	10230	380	1	10976	402
	754297	MINNESOTA	2	3	9665	3.2	307	2	7	10215	394	1	10638	376
	755603	MINNESOTA	6	23	12273	3.5	424	4	7	12248	429	2	11295	405
	757596	MAINE PENNSYLVANIA OHIO WISCONSIN MINNESOTA IOWA NORTH DAKOTA WASHINGTON	1 2 1 2 298 10 7 1	1 5 3 3 796 21 27 2	18840 11372 11980 12863 11584 11938 11723 14775	3.3 3.8 3.4 3.6 3.6 3.7 3.6 3.4	625 423 413 465 417 444 422 504		9 10 10 5 1	9283 11653 12021 12444 11148 9160	348 412 430 456 393 347	1 2 2 3	10682 11822 12354 10877	379 425 464 385
	757597	MINNESOTA IOWA MISSOURI NORTH DAKOTA NEBRASKA	206 5 1 2 1	610 14 5 3 1	12045 12219 8778 11090 10380	3.6 3.8 3.9 3.8 3.8	433 462 339 411 396	169 4 1 2 1	10 7 5 13 3	11981 12624 12004 13030 12660	431 454 451 459 450	2 1 4 1 1	11828 11850 11132 11969 13363	428 436 412 417 509
	758723	MINNESOTA	8	16	10419	3.5	368							

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
		759624	MINNESOTA	1	1	11220	3.6	401	1	23	12830	452	1	12415	447
		762771	MINNESOTA	8	30	11476	3.4	397	2	5	10997	390	4	11653	423
		765777	MINNESOTA	24	78	10815	3.3	372	3	6	12787	458	2	12117	445
		767156	MINNESOTA	8	32	11979	3.7	451	7	4	11586	445	2	11523	426
		776306	ILLINOIS	1	7	12779	3.5	457	1	22	12411	475	6	12328	471
			WISCONSIN	1	2	12985	3.3	426	1	12	13005	458	2	13129	472
			MINNESOTA	75	237	11785	3.5	413	51	9	11680	420	2	11493	413
		783828	MINNESOTA	20	55	11993	3.5	417	13	10	11330	415	3	11517	414
			IOWA	2	2	13225	3.8	506							
		786421	MINNESOTA	13	29	11902	3.5	419	9	10	11532	414	2	11746	435
			NEBRASKA	1	7	12933	3.9	501	1	24	11737	427	5	11223	409
			COLORADO	1	1	11850	3.7	434							
		794066	MINNESOTA	2	3	11798	3.7	438	1	5	10220	347			
		796258	NEW YORK	1	1	16080	3.4	546							
			MINNESOTA	121	403	11946	3.6	423	85	11	11616	421	2	11450	411
			IOWA	2	11	11915	3.8	454	2	7	13252	478	4	12323	452
			NORTH DAKOTA	2	4	15918	3.4	537	2	3	9870	376	2	11334	385
			NEBRASKA	4	20	9952	3.7	365	4	8	10400	390	3	9995	371
		801022	MINNESOTA	7	16	12000	3.5	422	2	13	9904	361	2	10499	380
			MISSOURI	1	1	10190	3.7	375	1	1	10930	431	1	10377	416
		809707	MINNESOTA	6	28	12221	3.3	396	3	5	11924	430	4	11047	406
		819478	WISCONSIN	1	2	12040	3.8	440	1	14	11580	410	1	11020	400
			MINNESOTA	515	889	11754	3.5	405	465	14	11928	423	2	11755	420
			IOWA	19	33	12014	3.6	433	17	7	11825	424	2	11767	424
			NORTH DAKOTA	46	81	11919	3.5	416	45	40	11923	429	1	11458	413
			KANSAS	1	1	11560	3.9	454							
		824230	MINNESOTA	1	4	12420	3.1	379	1	8	11295	376	2	11968	412
		824340	NEW YORK	1	1	12910	3.6	467							
			MINNESOTA	593	1522	11526	3.8	434	540	10	11742	420	2	11638	420
			IOWA	14	35	12654	3.8	474	13	9	11926	422	2	12227	441
			MISSOURI	2	5	11117	4.1	447	2	4	7545	294	2	7641	341
			NORTH DAKOTA	18	46	12174	3.8	462	18	29	11654	410	2	11012	389
			NEBRASKA	2	5	10484	4.1	426	1	5	10460	437	3	12411	462
			MONTANA	1	4	14185	3.7	520	1	23	13373	458	3	13145	455
		836120	MINNESOTA	1	6	11375	3.4	387							
		838718	MINNESOTA	457	934	10659	3.5	376	382	10	11979	427	2	11765	422
			IOWA	22	50	10740	3.6	383	22	7	12689	452	2	12471	449
			NORTH DAKOTA	42	83	10072	3.6	358	40	27	11635	416	2	11212	397
			NEBRASKA	1	3	7337	3.7	272	1	6	9713	335	2	8426	299
		839126	MINNESOTA	7	33	11979	3.4	402	3	18	11606	416	2	11025	393
		841396	MINNESOTA	6	35	12764	3.7	473	4	5	13699	486	3	12943	468
			IOWA	1	8	12065	3.6	436							
		847176	MINNESOTA	69	170	11288	3.6	409	64	11	11692	427	2	11764	422
			IOWA	2	3	11145	3.5	390	1	7	9380	359	2	10900	413
			NORTH DAKOTA	7	22	11015	3.7	405	5	62	11541	408	3	11287	403
		850713	MINNESOTA	47	120	13196	3.4	445	40	11	14129	488	2	13405	471
			GEORGIA	1	1	16150	3.2	517	1	89	8600	342	1	9647	382
		856202	MINNESOTA	9	26	12281	3.5	431	6	12	12953	453	2	12392	433
		863787	MINNESOTA	8	31	11819	3.7	437	5	7	11704	422	2	11661	430
			NEBRASKA	1	2	7265	3.9	280							
		898594	MINNESOTA	136	325	11344	3.7	414	131	12	12077	430	2	12001	432
			IOWA	13	25	11118	3.5	396	10	34	11558	426	2	9568	417
			NORTH DAKOTA	2	7	13625	3.6	489	1	78	12362	431	5	11859	420
		914239	MINNESOTA	9	36	11740	3.5	399	8	13	11951	430	3	11884	423
		921322	MINNESOTA	38	134	10822	3.7	390	37	11	11633	423	3	11494	414
		927863	MINNESOTA	286	676	11484	3.6	410	241	10	11760	422	2	11506	413
			IOWA	3	9	8843	3.8	337	2	7	9646	377	3	9385	375
			NORTH DAKOTA	5	16	10247	3.6	361	5	9	11313	398	3	10793	380
			NEBRASKA	1	1	13310	3.6	482	1	12	13820	478	1	14377	505

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAS.	CONTEMPORARY NO.	RECORDS MILK LB.	AV. FAT LB.	YEARLY NO.	HERO MILK LB.	AV. FAT LB.
		1008302	MINNESOTA	3	5	10883	3.6	394	3	7	11432	410	1	12737	454
	JER.	401257	MINNESOTA	12	25	7000	5.1	354	3	5	8220	431	1	8251	337
		486929	MINNESOTA	1	6	7340	4.7	346							
	B.S.	54162	MINNESOTA	9	22	8050	4.3	345	4	8	10577	446	4	9706	400
			IOWA	1	1	8010	5.0	402	1	15	10980	453			
		54954	WISCONSIN	1	2	9475	4.3	403	1	7	10745	459	2	11472	475
			MINNESOTA	6	10	8981	4.4	394	1	5	9840	373	1	9788	384
			NORTH DAKOTA	1	3	8547	4.0	342	1	5	9920	399	3	9926	396
			MONTANA	1	1	12590	4.3	536	1	3	7890	319			
		86252	MINNESOTA	9	13	7104	3.8	275	2	5	10493	425	2	8900	373
	M.SH	2084694	MINNESOTA	2	3	10328	4.1	423	2	9	10698	411	2	9440	385
			IOWA	1	1	8560	3.6	306	1	2	10740	396			
003	GUER	288160	MINNESOTA	4	10	7172	5.0	357	2	8	7989	370	3	8337	383
		323865	MINNESOTA	13	24	6764	4.6	311	13	10	8803	393	2	8397	388
		330319	MINNESOTA	1	1	6330	4.8	302							
		376756	MINNESOTA	13	26	7802	4.9	382	10	6	8363	382	2	8446	388
		383038	MINNESOTA	19	63	7167	4.9	350	18	8	7761	379	2	7631	370
		421719	MINNESOTA	13	27	7878	5.1	400	12	14	8607	416	2	8651	418
		466808	MINNESOTA	4	9	7171	4.9	351	4	15	8240	388	2	8105	381
		469206	MINNESOTA	13	23	7082	4.9	347	12	15	8535	397	2	8446	383
	HOL.	897534	MINNESOTA	31	68	10970	3.5	381	29	6	12634	441	2	11683	410
			NORTH DAKOTA	5	12	7915	3.8	302	5	7	8828	338	2	9173	343
		907607	MINNESOTA	13	33	11707	3.6	423	13	6	11864	414	2	11682	414
		955370	MINNESOTA	62	124	12000	3.6	433	60	11	11763	427	2	11869	429
			NORTH DAKOTA	9	19	9505	4.0	371	8	7	9766	369	2	9730	353
			KANSAS	2	2	8710	3.7	320	2	68	7840	304			
		1090376	MINNESOTA	9	15	11558	3.5	408	9	8	11446	425	2	11885	438
			NORTH DAKOTA	4	5	12131	3.5	421	3	7	13140	457	1	11731	415
		1121407	MINNESOTA	3	5	10794	3.9	419	3	19	11440	436	1	11867	441
		1154142	MINNESOTA	47	67	11617	3.7	424	46	10	11711	430	1	12117	439
			NORTH DAKOTA	11	11	10135	3.8	389	11	14	11712	424	1	10539	389
		1189002	MINNESOTA	2	2	12095	4.1	484	2	11	12880	521	1	12502	474
		1209326	MINNESOTA	11	13	11975	4.2	498	11	8	12696	470	1	12362	462
			NORTH DAKOTA	3	5	8702	4.2	356	2	16	8773	331	2	9243	338
		1211376	MINNESOTA	11	16	11540	3.6	413	11	8	12023	429	1	12670	461
			NORTH DAKOTA	6	8	11562	3.8	435	6	10	11425	411	2	11108	396
		1261309	MINNESOTA	5	7	12409	3.8	463	4	12	12010	444	1	12106	441
		1268124	MINNESOTA	1	1	15860	3.2	508	1	45	11530	394	1	12481	436
	JER.	438165	NEW YORK	25	105	9147	5.3	477	1	38	7893	417	2	8257	407
			INDIANA	3	6	8292	5.4	452	2	10	8520	454	1	7881	425
			ILLINOIS	3	14	11570	4.9	573	3	9	10257	517	3	9543	500
			MICHIGAN	1	2	6910	5.1	351							
			WISCONSIN	14	18	7313	5.3	386	8	12	7092	369	1	7386	382
			IOWA	1	5	8898	5.2	464	1	7	7720	410	4	7390	392
			MISSOURI	2	2	8340	4.9	408	1	13	6980	396	1	6932	388
			NORTH CAROLINA	2	2	8875	5.0	430							
			GEORGIA	4	7	8311	5.1	425	2	17	6600	338	1	6987	359
			FLORIDA	10	22	9226	5.0	458	3	40	8415	412	1	7822	397
			MISSISSIPPI	1	4	7010	5.4	376	1	35	7237	377	2	6584	335
			WASHINGTON	1	3	11337	6.3	713	1	9	9960	549	1	9854	546
		441066	ILLINOIS	2	3	9305	5.0	461	1	3	5970	291	1	7281	360
			MICHIGAN	3	4	8190	5.4	440							
			WISCONSIN	7	28	8136	5.4	445	4	11	7717	428	2	8509	475
			IOWA	3	6	6765	5.5	372	3	17	6820	339	1	7579	398
	B.S.	116978	MINNESOTA	1	1	6340	4.1	261	1	24	9840	365	1	9211	338
			NORTH DAKOTA	1	2	12360	4.3	527	1	4	14190	597	1	13549	578

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY NO. RECORDS	MILK LB.	FAT LB.	AV. NO. RECORDS	HERD MILK LB.	AV. FAT LB.
004	M. SH	2074210	MINNESOTA	1	1	5120	4.3	220	1	7	6910	274	1	6823	268
		2233656	MINNESOTA	1	3	7157	3.9	279	1	4	8550	335	2	6486	253
	AYR.	84747	MINNESOTA	15	18	9125	4.4	397	15	10	10255	408	1	9890	401
		102523	MINNESOTA	11	14	9508	4.0	377	11	13	9943	397	1	9736	394
	GUER	353790	WISCONSIN	4	7	8765	4.9	424	3	13	9368	445	2	9325	439
			MINNESOTA	3	3	7737	4.8	368	3	12	7393	363	1	6824	327
		365713	MINNESOTA	45	104	7139	4.8	342	44	10	8496	384	2	8353	379
			IOWA	1	4	9603	5.2	504	1	13	9545	468	1	9581	458
			NORTH DAKOTA	1	1	7650	4.7	361							
		377693	MINNESOTA	2	2	8650	4.2	362	2	11	7400	366	1	7717	396
			NORTH DAKOTA	1	1	8640	5.0	432							
		385567	MINNESOTA	13	26	7258	4.8	345	13	14	8716	390	2	8713	394
			NORTH DAKOTA	1	1	9130	5.1	469	1	9	8510	425			
		400315	WISCONSIN	4	8	7460	5.3	397							
			MINNESOTA	16	24	8129	4.9	399	16	9	8382	398	2	8061	390
			NORTH DAKOTA	1	1	6230	4.4	273	1	9	7760	350	1	8458	367
		407395	MINNESOTA	18	48	7394	5.1	373	18	9	7651	367	2	7826	387
		411518	WISCONSIN	1	1	6890	4.4	303	1	5	8290	392	1	8219	383
			MINNESOTA	4	6	8567	4.8	407	3	4	7721	377	2	8599	410
		430275	WISCONSIN	1	1	8490	4.0	338							
		435547	WISCONSIN	2	3	8015	5.0	395	2	18	9315	391	1	9478	405
			MINNESOTA	5	6	8935	4.6	406	4	21	9374	435	1	9031	426
			NORTH DAKOTA	1	1	6250	5.4	340	1	9	7770	354	1	8458	367
		441166	MINNESOTA	1	1	8290	5.3	441	1	16	9010	397			
		442503	WISCONSIN	5	7	9045	4.9	438	5	12	9052	444	1	9078	430
			MINNESOTA	8	9	9213	4.7	427	8	15	8992	430	1	9097	439
		444052	OHIO	1	1	6470	4.8	311							
			WISCONSIN	4	5	9724	4.6	446	4	15	9963	416	1	10453	441
			MINNESOTA	88	151	8446	4.7	393	84	11	8483	395	2	8555	396
			IOWA	3	6	7932	5.1	402	2	6	8657	433	1	8796	461
			NORTH DAKOTA	2	2	6475	5.4	350	2	6	8610	431	1	7020	358
			ARKANSAS	1	3	8220	5.0	411	1	40	8380	357			
		449174	WISCONSIN	2	2	8175	5.2	422	2	4	8320	389	1	8611	400
			MINNESOTA	2	2	7920	4.8	373	1	14	10430	395	1	10432	433
		454353	MINNESOTA	4	10	7765	5.2	398	4	7	8067	392	2	9058	436
		458610	WISCONSIN	3	3	8187	5.0	409	3	11	9207	450	1	9283	443
			MINNESOTA	19	25	7363	4.9	359	15	10	8408	392	1	9293	432
		463145	MINNESOTA	1	1	7750	4.2	323							
		466643	WISCONSIN	2	2	8115	4.8	389	2	24	9030	392	1	9505	402
			MINNESOTA	7	9	8186	4.8	386	7	8	8456	379	1	8591	398
			NORTH DAKOTA	1	1	7280	5.8	422	1	4	9610	441	1	9243	483
		467223	WISCONSIN	4	6	9215	5.0	458	4	19	9696	450	2	10112	498
		468506	WISCONSIN	4	6	7273	4.9	358	3	11	8028	411	2	8675	460
			MINNESOTA	35	69	7577	4.9	372	34	12	8085	385	2	8119	384
			IOWA	1	2	7625	5.3	402	1	3	9075	453	2	8649	445
		490792	WISCONSIN	2	2	6155	4.4	269	2	1	6260	256			
			MINNESOTA	8	8	8243	4.9	399	8	11	10971	468	1	9524	428
			NORTH DAKOTA	1	1	7470	4.6	342	1	6	10550	449			
		492015	WISCONSIN	2	2	8045	5.3	418	2	4	8620	435	1	9222	450
			MINNESOTA	1	1	6510	4.8	314	1	5	8550	407			
		493394	MINNESOTA	3	4	8975	4.4	396	2	6	9673	418	2	8849	395
		493639	MINNESOTA	5	6	7405	4.4	325	5	11	8081	373	1	8587	415
		501850	MINNESOTA	1	1	8540	5.1	439							
		503985	WISCONSIN	11	11	7817	4.9	379	11	23	9418	432	1	9240	426
		504967	WISCONSIN	1	1	10390	4.6	480	1	11	9100	452	1	9603	472
			MINNESOTA	2	2	8955	4.5	401	1	26	10070	502	1	9745	462

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREE	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV. YEARLY HERO	AV.
								NO. 0AUS.	RECORDS NO.	MILK LB.	FAT LB.	
	509325	MINNESOTA	1	1	9410	5.0	471	1	6	10070	561	1 9603 455
HOL.	813170	PENNSYLVANIA	1	1	12800	3.5	452					
		OHIO	1	3	11283	3.2	364	1	14	10347	353	2 10851 373
		WISCONSIN	2	3	11558	3.5	401	2	15	11658	413	2 12116 425
		MINNESOTA	478	1082	11624	3.6	421	425	12	11964	430	2 11701 421
		IOWA	15	40	11094	3.7	411	12	12	12209	446	2 12493 460
		NORTH DAKOTA	4	7	12081	4.1	491	3	11	11874	422	2 11754 411
		NORTH CAROLINA	1	1	13300	3.9	523					
		TEXAS	2	3	12570	3.6	452	1	4	14105	480	1 12677 432
	873324	PENNSYLVANIA	2	3	10580	3.9	420	2	22	12663	461	2 13176 488
		WISCONSIN	15	27	10846	3.8	404	12	10	12386	447	2 12492 454
		MINNESOTA	77	184	11573	3.7	422	72	12	12432	446	2 12375 445
		NORTH DAKOTA	2	3	15148	3.5	524	2	6	12815	445	1 10377 371
		SOUTH DAKOTA	1	2	7960	3.6	284	1	24	8710	303	
		NORTH CAROLINA	1	1	16270	3.6	578	1	22	12520	444	1 13963 505
	910828	PENNSYLVANIA	1	3	9537	3.5	333	1	18	9665	352	2 10464 382
		WISCONSIN	27	54	11706	3.5	411	26	10	11907	430	2 11743 435
		MINNESOTA	101	222	10858	3.6	389	94	10	11505	413	2 11298 408
		NORTH DAKOTA	5	13	11151	3.6	395	5	8	12095	429	2 11601 407
	922420	WISCONSIN	16	20	12028	3.9	465	16	9	11353	414	1 11365 414
		MINNESOTA	65	114	11721	3.8	441	61	13	11553	422	2 11589 427
		IOWA	2	5	12392	4.1	508	2	17	13599	495	2 12530 448
		NORTH DAKOTA	6	7	9047	4.1	366	6	12	12396	438	1 10865 384
	933201	WISCONSIN	3	4	11218	3.9	433	1	13	9265	378	2 9966 424
		MINNESOTA	64	88	11149	3.6	397	62	24	12455	451	1 11753 441
		NORTH DAKOTA	7	9	12715	3.2	403	6	9	13051	460	1 11854 413
	933248	NEW JERSEY	1	3	16033	4.2	667	1	1	13460	544	2 14737 561
		PENNSYLVANIA	1	1	12330	3.7	457	1	15	9700	345	
		WISCONSIN	24	40	12354	3.7	461	20	10	12206	459	1 12464 464
		MINNESOTA	91	130	12075	3.7	444	87	15	12137	440	1 12083 440
		IOWA	1	2	16675	3.9	647	1	48	14970	549	2 15522 570
		NORTH DAKOTA	8	16	13413	3.6	492	8	10	12955	471	2 12383 431
		SOUTH DAKOTA	1	1	10770	2.8	303	1	11	11020	372	
		VIRGINIA	1	1	14430	4.1	589	1	29	14540	556	1 12611 479
	939182	WISCONSIN	17	25	12189	3.5	423	13	9	12568	459	1 12912 480
		MINNESOTA	136	251	12238	3.4	417	129	15	12242	436	2 11375 429
		NORTH DAKOTA	17	26	11475	3.4	389	15	9	12701	445	1 11767 409
		KANSAS	1	1	10220	3.5	361	1	16	11410	416	1 10660 412
	948424	PENNSYLVANIA	1	6	9572	3.4	321	1	11	11167	412	4 9807 357
		WISCONSIN	12	28	12378	3.7	464	11	10	12920	482	2 12702 476
		MINNESOTA	64	152	10716	3.6	386	62	12	11396	407	2 11287 403
		MISSOURI	1	5	12304	3.8	468	1	13	10618	389	5 10436 391
		NORTH DAKOTA	3	6	12567	3.9	491	3	10	13423	461	1 13076 448
	952437	ILLINOIS	2	2	14360	3.8	531	2	13	11385	437	1 12437 484
		WISCONSIN	29	47	11557	3.8	435	26	8	12613	461	2 11704 441
		MINNESOTA	74	117	11054	3.8	411	74	13	11678	422	2 11190 413
		NORTH DAKOTA	5	13	12120	3.6	430	5	7	12642	455	2 11755 428
	982050	PENNSYLVANIA	1	3	12423	3.7	458	1	20	8400	350	2 8736 370
		WISCONSIN	19	29	11746	3.7	435	17	9	12794	469	1 12958 467
		MINNESOTA	133	228	10665	3.7	394	128	10	11514	416	2 11610 422
		NORTH DAKOTA	10	19	11437	3.7	424	9	9	13038	465	2 11867 421
	984795	WISCONSIN	53	74	11854	3.9	458	40	12	12560	469	1 12339 460
		MINNESOTA	157	243	11980	3.8	448	147	15	12449	448	2 12216 447
		IOWA	1	1	14600	3.9	576	1	11	16000	573	1 16644 586
		NORTH DAKOTA	9	11	12170	3.8	457	9	10	13394	479	1 12481 436
		NEBRASKA	1	1	15060	3.5	526					
		WEST VIRGINIA	1	1	9520	3.7	348					
	984801	NEW JERSEY	1	2	14135	3.6	510					
		PENNSYLVANIA	1	3	13397	3.8	500	1	9	12623	437	1 11129 366
		WISCONSIN	73	145	13262	3.7	484	61	12	12683	480	1 12556 470
		MINNESOTA	233	425	12179	3.6	432	226	14	12245	441	2 12201 443
		IOWA	4	13	14945	3.6	532	3	15	13921	519	3 13737 508
		NORTH DAKOTA	10	17	12582	3.4	422	9	7	10333	375	2 11232 395
		SOUTH DAKOTA	1	4	11565	4.3	500	1	5	11725	445	1 8840 373
		SOUTH CAROLINA	1	1	13880	3.2	450					
		COLORADO	1	1	13000	3.7	484	1	9	14020	475	1 12077 429
		UTAH	2	8	13266	3.6	474	2	14	13536	475	2 13500 478
	990861	PENNSYLVANIA	1	2	10405	3.3	344	1	13	11690	457	
		WISCONSIN	6	15	12092	3.7	447	5	8	12719	483	2 12813 482
		MINNESOTA	38	66	11061	3.7	399	37	13	11229	401	2 11211 403
		NORTH DAKOTA	4	6	13134	3.4	451	4	5	13363	470	2 11171 416
		SOUTH DAKOTA	1	1	12910	3.3	422	1	11	9710	328	1 11674 411

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY NO. NO.	AV. MILK LB.	FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
992858	MICHIGAN		1		14860	3.8	558	1	15	12640	468	1	13505	484
		WISCONSIN	26	29	11701	3.8	445	25	11	11056	417	1	11056	420
		MINNESOTA	271	508	12475	3.7	466	269	17	12366	447	2	12199	444
		MISSOURI	1	1	13150	3.4	447	1	4	12120	419	1	9930	341
		NORTH DAKOTA	4	6	15248	3.8	571	4	9	13052	469	3	13360	467
1010660	NEBRASKA		1	1	14480	3.8	556	1	8	12240	419	1	12884	447
		NEW YORK	1	1	14680	3.6	526							
		PENNSYLVANIA	1	1	15070	3.8	569	1	35	13060	488	1	13353	513
		WISCONSIN	53	69	14008	3.7	516	51	10	12774	475	1	13164	489
		MINNESOTA	610	1075	13204	3.6	477	600	17	12474	454	2	12289	449
1018853	IOWA		11	16	15278	3.7	555	10	20	14118	514	2	12135	520
		NORTH DAKOTA	4	5	11735	4.0	461	4	9	14139	510	1	13247	463
		NEBRASKA	4	6	14283	3.6	505	3	4	11933	413	2	13852	494
		KANSAS	4	6	13255	3.8	506	3	15	13240	505	1	12215	454
		TEXAS	1	1	11750	3.4	402	1	4	9960	358			
1025338	WISCONSIN		4	6	14406	3.8	533	4	6	11238	430	2	12078	470
		MINNESOTA	199	303	13727	3.5	480	189	19	12385	448	1	12125	444
		MISSOURI	1	1	2680	3.7	99	1	12	8950	333	1	6856	246
		NEBRASKA	1	2	13895	3.4	476	1	7	11245	447	2	10399	379
		KANSAS	1	1	14320	3.6	510	1	16	12300	471	1	11903	447
1030195	WISCONSIN		13	16	12754	3.7	468	11	13	12410	459	1	11822	444
		MINNESOTA	29	42	12056	3.6	434	22	20	11930	427	1	11472	415
		NORTH DAKOTA	4	5	11399	3.4	380	2	7	10020	358	1	8785	287
		WISCONSIN	4	6	11830	3.6	419	4	9	12908	474	2	14279	542
		MINNESOTA	118	174	12359	3.8	464	110	22	12689	460	1	12451	455
1035507	IOWA		1	1	11330	3.9	444	1	32	15750	568	1	14704	510
		NORTH DAKOTA	4	7	11609	4.0	463	4	9	13473	467	2	12712	446
		KANSAS	1	1	13730	4.0	551							
		TEXAS	1	2	13555	4.0	538	1	12	13115	468	2	11658	435
		WISCONSIN	3	3	12377	3.8	465	3	8	11623	453	1	12732	490
1043856	MINNESOTA		43	66	12909	3.6	464	33	25	12936	465	2	12004	462
		IOWA	6	9	15394	3.6	557	4	49	15858	593	2	14114	570
		WISCONSIN	16	22	12993	3.6	468	15	14	12528	457	1	12777	472
		MINNESOTA	80	130	13160	3.6	477	67	19	12777	464	1	12155	451
		NORTH DAKOTA	4	4	15388	3.8	584	3	11	13283	475	1	12704	445
1044435	WISCONSIN		1	1	5670	3.9	218	1	25	9360	342	1	11249	438
		MINNESOTA	224	470	11414	3.7	422	222	18	12266	444	2	11914	432
		IOWA	5	9	13052	3.9	506	5	24	14658	529	2	14770	528
		NEBRASKA	3	6	10265	3.8	384	3	7	11897	447	1	13200	484
		MINNESOTA	2	2	11185	3.9	434	2	27	12225	480	1	11990	454
1052196	WISCONSIN		16	18	11172	3.6	405	15	10	12458	461	1	13115	490
		MINNESOTA	88	130	12639	3.6	448	84	20	12576	464	2	12098	452
		NORTH DAKOTA	6	9	11692	3.6	417	6	7	12387	440	2	12578	439
		KANSAS	1	1	11860	3.6	425							
		VIRGINIA	1	1	15130	4.2	639	1	42	13350	468			
1072342	MINNESOTA		2	2	12825	3.4	434	1	9	14020	506	1	14704	520
		NORTH DAKOTA	1	1	13290	3.2	420	1	8	9460	359	1	8186	296
		WISCONSIN	18	25	13269	3.6	478	18	13	13045	499	1	13474	502
		MINNESOTA	95	122	12195	3.6	433	88	28	12503	460	1	12148	453
		IOWA	1	1	12770	3.4	434							
1079168	NORTH DAKOTA		5	7	14074	3.4	486	5	10	13648	498	1	13753	481
		SOUTH DAKOTA	1	1	11640	3.7	435	1	27	11380	400	1	12622	443
		WISCONSIN	1	1	13680	3.6	486	1	15	12140	451	1	10475	398
		MINNESOTA	5	6	12704	3.3	418	5	10	12042	437	1	11886	430
		MINNESOTA	38	46	13535	3.5	479	37	25	12888	469	1	12112	466
1096540	MINNESOTA		1	1	12510	3.7	467	1	34	13110	467			
		ILLINOIS	1	2	16220	3.7	600	1	13	14250	539	1	13723	520
		WISCONSIN	1	3	11540	3.6	418	1	21	9540	402	1	9930	423
		MINNESOTA	58	98	11819	3.5	413	55	25	12338	446	2	11841	443
		WISCONSIN	17	23	12324	4.0	488	17	12	12755	496	1	13405	507
1107852	MINNESOTA		83	107	10779	3.8	412	83	30	12552	461	1	12285	456
		WISCONSIN	1	1	10230	3.6	373	1	12	13050	471	1	12666	460
		MINNESOTA	26	27	12227	3.7	452	24	23	13399	491	1	12957	489
		MINNESOTA	4	5	12458	3.5	439	2	29	13595	481	2	11029	480
		MINNESOTA	7	10	12206	3.8	458	4	11	11895	436	2	11912	430
1130589	MINNESOTA		20	31	11612	4.1	468	18	15	12124	450	2	11969	449
		NORTH DAKOTA	4	4	8788	3.8	331	4	8	12168	445	1	11689	418

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV. FAT LB.	YEARLY HERD		AV. FAT LB.
								NO. DAUS.	RECORDS NO.	MILK LB.		NO.	MILK LB.	
	1131186	WISCONSIN	1	1	13660	3.4	467	1	22	11370	412	1	13026	453
		MINNESOTA	24	33	11491	3.8	435	23	13	11996	433	1	12622	459
	1133812	MINNESOTA	9	16	10987	3.5	385							
	1135651	WISCONSIN	4	6	14478	3.7	530	4	6	15250	604	1	14879	549
		MINNESOTA	26	32	11092	3.9	424	26	23	12627	460	1	12153	453
		NORTH DAKOTA	3	3	10223	4.0	408	3	10	12783	460	1	12491	443
	1146343	PENNSYLVANIA	2	2	11320	3.7	421	2	28	13250	484	1	13031	493
		WISCONSIN	8	10	14318	3.8	537	6	18	13798	524	1	13561	518
		MINNESOTA	39	54	12991	3.7	484	39	27	12318	443	1	12080	447
		NORTH DAKOTA	1	1	15750	3.6	565	1	13	13490	478	1	11042	384
	1161998	MINNESOTA	1	1	11990	3.7	445							
	1175561	WISCONSIN	12	13	14110	3.8	536	12	12	13025	486	1	12889	482
		MINNESOTA	66	99	12022	3.7	442	56	23	12502	455	1	12023	457
		NORTH DAKOTA	1	1	14800	3.6	538	1	6	10840	380	1	8785	287
		VIRGINIA	1	1	8130	3.5	281							
	1178237	MINNESOTA	12	12	13472	3.8	514	11	38	13226	482	1	12805	462
		IOWA	3	3	17307	3.7	640	3	9	17450	649	1	15533	577
		NORTH DAKOTA	1	1	9720	3.9	376							
	1186474	MINNESOTA	1	1	11740	3.5	408					1	12481	463
	1189010	PENNSYLVANIA	2	2	11415	3.6	408	2	28	12165	455	1	14497	550
		WISCONSIN	8	8	13053	3.7	475	8	13	13849	508	1	14277	523
		MINNESOTA	63	72	12507	3.7	460	61	30	12767	459	1	12537	454
		IOWA	3	7	16688	3.8	640	2	61	15545	567	3	10910	574
		NORTH DAKOTA	2	2	13645	3.5	478	2	11	11950	419	1	12895	455
	1190889	WISCONSIN	4	5	13421	3.4	457	4	9	13219	502	2	12394	452
		MINNESOTA	25	32	12720	3.6	447	21	20	12507	448	1	12372	462
	1215370	MINNESOTA	1	1	12330	3.0	364							
	1246729	WISCONSIN	12	14	11455	4.1	473	12	15	11996	469	1	12754	489
		MINNESOTA	32	33	12615	3.9	492	32	24	12860	467	1	13351	487
		IOWA	1	1	13980	4.6	649	1	12	13240	480	1	13810	500
		NORTH DAKOTA	2	2	8905	3.4	301	2	9	11310	405	1	13145	455
	1249809	MINNESOTA	2	2	13530	3.7	495							
JER.	464614	MINNESOTA	17	48	8953	5.0	444	17	16	8574	438	2	8578	438
	478932	MINNESOTA	20	33	7352	5.3	387	17	7	8852	437	1	8352	415
	505700	IOWA	5	12	8726	5.1	434							
	507639	WISCONSIN	1	2	9080	5.1	462							
		MINNESOTA	25	35	6841	5.3	359	17	10	8256	435	1	8554	457
	509518	MINNESOTA	2	3	9055	5.8	522	2	5	10108	380	1	13320	499
	510736	MINNESOTA	7	7	5947	6.0	350	6	12	9393	486	1	9082	491
	516302	WISCONSIN	1	2	9750	4.5	431							
		MINNESOTA	4	6	7566	5.8	431	4	14	8540	456	1	8798	478
		IOWA	1	1	9160	5.5	500							
	519939	MINNESOTA	4	5	6719	5.5	372	3	9	7670	402	1	8727	418
B.S.	540080	MINNESOTA	3	9	7217	5.2	374	3	9	8802	371	1	9205	398
	61566	WISCONSIN	1	1	11510	4.2	482	1	10	10650	444	1	12284	505
		MINNESOTA	12	20	11547	3.9	444	9	16	11043	437	1	10822	419
		NORTH DAKOTA	5	7	10092	4.0	402	4	6	9256	377	2	9745	390
	65397	WISCONSIN	1	1	6240	4.8	301	1	12	8220	337			
		MINNESOTA	8	21	9379	4.4	409	6	13	11559	440	1	10408	434
		NORTH DAKOTA	1	2	11325	3.8	423	1	4	9195	369	2	10006	399
	75282	WISCONSIN	4	4	12083	4.2	510	4	7	11365	461	1	12284	505
		MINNESOTA	15	31	11602	4.1	473	10	13	11268	438	2	10956	432
		NORTH DAKOTA	5	8	9168	4.1	379	4	8	9600	389	1	9162	366
	76657	MINNESOTA	2	5	10519	3.8	400					2	10557	371
	90275	WISCONSIN	11	19	8688	3.9	339	11	6	8857	335	1	8694	337
		MINNESOTA	2	3	10603	3.7	386	2	21	11430	445	2	10663	421
		NORTH DAKOTA	1	1	10270	4.0	410	1	11	9560	375	1	9766	392

TABLE 16.—DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS—GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	AV. RECORDS NO.	YEARLY HERO RECORDS NO.	MILK LB.	FAT LB.
005	GUER	101807	NEW JERSEY	1	1	11180	4.3	485	1	50	10290	413	1	10431	435	
			INDIANA	2	4	12705	3.9	496	1	2	14320	564				
			ILLINOIS	2	2	11945	3.8	448	2	15	11090	450	1	10732	445	
			MICHIGAN	1	3	10167	3.8	391								
			WISCONSIN	35	46	11133	4.0	445	32	12	11628	469	1	11552	467	
			MINNESOTA	3	6	11134	4.2	468	3	7	11567	470	2	9897	466	
		103474	SOUTH DAKOTA	1	3	13307	4.7	627								
		104309	MINNESOTA	7	8	11290	4.1	455	7	18	12380	465	1	11783	448	
		107380	MINNESOTA	1	1	17470	4.1	718	1	9	16000	608				
			IOWA	1	1	10470	4.1	432	1	2	10340	453	1	11249	495	
		110871	MINNESOTA	1	1	11610	3.5	407	1	9	16650	643				
		113785	MINNESOTA	3	5	13150	4.2	539	2	27	12570	516	1	12323	492	
	M. SH	307	MINNESOTA	4	15	7802	3.8	294	3	10	7454	296	4	6662	259	
		4194	WISCONSIN	2	4	12810	3.6	459	1	15	9635	374	1	8426	327	
			MINNESOTA	1	1	5460	3.5	193	1	11	7080	274	1	6747	264	
		39454	MINNESOTA	1	3	8920	3.9	352	1	12	7647	298	3	6700	260	
			IOWA	1	1	11260	4.1	463	1	4	8960	393	1	5243	213	
		104355	MINNESOTA	1	1	6810	4.2	286	1	13	9820	391	1	9766	371	
		109520	IOWA	1	1	8730	4.1	355								
		131677	WISCONSIN	1	2	11070	3.7	401	1	21	9445	366	1	8426	327	
			MINNESOTA	1	1	12570	3.5	444	1	15	7950	309	1	8001	305	
		134259	WISCONSIN	2	3	9348	3.9	365	2	16	8940	341	1	8426	327	
		137067	MINNESOTA	2	2	6620	3.8	248	2	10	7945	309	1	7281	280	
		153207	MINNESOTA	1	1	7830	3.5	277	1	9	7770	305	1	7281	280	
005	GUER	271911	MINNESOTA	7	11	6682	4.8	318	4	9	8972	373	1	12224	460	
			IOWA	1	2	8345	5.4	454	1	2	10250	472	1	9287	431	
		285271	MINNESOTA	1	4	5158	4.4	230								
			IOWA	2	6	7135	4.7	333								
		286560	MINNESOTA	1	2	6775	5.7	387								
		289084	MINNESOTA	4	11	7855	5.2	408	2	4	7097	351				
			IOWA	1	1	8690	4.9	430								
		324677	MINNESOTA	10	21	8083	5.1	401	6	5	7572	375	2	8355	428	
			KANSAS	1	1	4880	5.3	258								
			MONTANA	1	7	7436	4.9	368	1	12	9397	490	1	9439	489	
		346451	MINNESOTA	3	7	9900	4.4	437	3	8	9240	420	1	8017	373	
			MONTANA	1	4	6858	6.3	427	1	1	10480	539	2	9739	493	
		391983	MINNESOTA	5	10	7322	5.0	366	5	8	7475	348				
		425805	MINNESOTA	1	2	10375	4.8	497	1	2	8460	479	2	8835	416	
005	GUER	451557	MINNESOTA	3	4	10787	4.2	453	3	11	9485	431	1	9151	442	
		485329	MINNESOTA	2	2	8530	5.2	437	2	15	9205	428	1	9298	438	
		488385	MINNESOTA	5	9	9163	4.9	442	1	9	9390	433				
	HOL.	993099	MINNESOTA	6	11	10166	3.9	392	2	7	11120	416	2	11383	408	
		1243216	MINNESOTA	1	1	12720	3.4	428					1	10235	483	
	006	201154	MINNESOTA	1	2	5325	5.2	279								
		228073	MINNESOTA	3	10	7023	4.8	332	1	7	8546	423	1	8851	445	
		257182	MINNESOTA	1	1	8030	4.2	336								
			MISSISSIPPI	1	1	5590	3.8	211								
		260735	MINNESOTA	3	6	7793	5.1	398								
006	GUER	268139	MINNESOTA	14	40	7193	5.2	368	2	12	8155	421	1	8371	437	
		306720	MINNESOTA	1	8	5948	4.9	293	1	18	7415	352	4	7145	351	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
HOL.	306818	MINNESOTA	1	4	7805	4.8	373							
	667791	OHIO	1	1	13150	4.0	528							
		WISCONSIN	1	1	11620	3.9	456							
		MINNESOTA	18	43	13060	3.6	465	2	1	13285	444			
	735493	MINNESOTA	13	34	11161	3.5	393	3	10	12138	447	3	11147	390
	742705	MINNESOTA	1	2	8495	3.8	318							
	759625	MINNESOTA	2	6	11150	3.7	411	1	1	13193	482	2	11183	424
	762308	MINNESOTA	9	31	11667	3.7	426							
	766408	MAINE	13	43	11982	3.8	456	1	6	13948	548	3	12575	493
		MASSACHUSETTS	1	1	10560	4.1	434							
	769599	MINNESOTA	1	1	12800	3.8	488							
		NORTH CAROLINA	1	7	11390	3.6	405	1	13	12437	433	3	12989	456
	775609	MINNESOTA	3	14	12675	3.3	419	1	6	11366	380	3	10268	363
	784882	MINNESOTA	13	36	10157	3.6	368	6	5	12078	434	2	11601	413
		TEXAS	1	6	10492	3.4	362	1	5	12526	448	2	11047	394
	790036	MINNESOTA	2	3	7760	3.5	255	1	5	10320	377			
	802158	MINNESOTA	3	11	12783	3.5	443							
	822968	MINNESOTA	6	7	10702	3.4	366	1	1	10890	348			
		NORTH CAROLINA	2	7	12818	3.4	436	1	14	12198	414	3	12571	441
	827003	MINNESOTA	2	6	11805	3.6	418							
	831996	MINNESOTA	2	2	10195	3.5	355							
	834018	MINNESOTA	1	1	12790	3.5	446							
007 GUER	838797	MINNESOTA	13	24	11617	3.5	405	2	6	11848	414	1	11544	405
	208105	WISCONSIN	1	1	8340	4.2	353							
		MINNESOTA	16	32	6697	5.0	331	2	5	10364	422	1	9232	393
		IOWA	1	3	7900	4.9	385							
	224888	MINNESOTA	18	53	7767	5.2	405	2	6	8072	387	4	8637	427
	282050	MINNESOTA	6	7	6795	4.7	320	2	9	7493	375	2	8933	444
	284719	MINNESOTA	5	7	8623	4.5	386							
	288563	MINNESOTA	14	28	7574	5.1	387	8	5	8536	390	1	7769	364
	292507	WISCONSIN	1	1	9010	5.3	476							
		MINNESOTA	3	5	6989	4.3	310							
	361350	MINNESOTA	4	9	5910	4.9	283	1	3	7640	373	2	6671	350
	380113	MINNESOTA	1	1	6940	4.8	334	1	6	7070	339	1	7663	341
	395766	MINNESOTA	2	3	7035	4.8	326							
	417469	MINNESOTA	5	7	7718	4.9	376	5	11	8069	397	1	8333	412
	425863	MINNESOTA	3	8	9814	5.0	485							
	455478	MINNESOTA	2	10	7220	4.9	352	2	7	8079	390	4	8324	410
	464132	MINNESOTA	1	1	8520	4.4	375	1	11	9670	479	1	8339	402
	827878	MINNESOTA	4	9	9803	4.0	386							
	869645	MINNESOTA	3	6	8057	4.1	326	3	3	9432	367	1	8513	347
	899650	MINNESOTA	3	3	11920	3.0	360	1	1	11220	449			
008 GUER	902828	MINNESOTA	7	31	11728	3.6	417	7	8	10350	383	3	11015	400
	1011176	MINNESOTA	4	9	9799	3.6	348	3	8	9971	371	3	10152	368
	313377	MINNESOTA	7	17	7173	4.8	346	1	7	6743	305	1	7140	328
	385219	MINNESOTA	6	16	8889	4.7	421	5	6	8607	399	3	8685	405
	877481	MINNESOTA	1	1	9480	3.7	353							
		TEXAS	1	5	12946	3.5	450	1	15	10990	422	4	10230	409

TABLE 16.—DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS—GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
010	GUER	352950	MINNESOTA	4	11	8030	4.8	388	2	6	8514	419	3	8451	409
	HOL.	754586	MINNESOTA	9	14	11653	3.9	450	4	7	11081	390	1	10762	385
		835284	MINNESOTA	2	5	10654	3.6	376							
		859159	NEW YORK	1	1	13330	3.4	448							
			MINNESOTA	1	2	11940	3.8	443							
011	GUER	381667	WISCONSIN	1	2	7820	4.9	380	1	5	7005	355	1	6802	391
	HOL.	754589	IOWA	1	4	8375	4.2	355	1	6	10873	406	4	11290	434
		833968	MINNESOTA	1	1	9060	4.1	372							
		931107	NEW JERSEY	1	1	10130	4.3	431							
			IOWA	1	1	10150	4.0	410	1	11	11500	419	1	12938	470
012	GUER	991146	MINNESOTA	4	8	11319	3.6	402	3	4	13004	458	1	12632	443
		212158	MINNESOTA	5	11	7785	5.6	427							
		213384	MINNESOTA	6	11	5994	5.2	317	1	8	8068	406	1	8371	407
		215153	MINNESOTA	3	7	7573	5.0	377	1	11	9420	464	1	7870	384
	HOL.	327569	MINNESOTA	4	6	6496	5.2	339							
			IOWA	4	4	4923	5.2	256							
		701065	MINNESOTA	13	37	13465	3.2	430	2	11	11333	402	2	11124	392
			SOUTH DAKOTA	1	6	16448	3.0	485	1	4	15724	538	3	15373	520
		711654	WISCONSIN	1	4	12568	3.7	460							
			MINNESOTA	16	38	11459	3.5	401	1	9	11388	405	1	11794	413
		720356	MINNESOTA	2	13	14558	3.3	476	2	12	13543	443	2	13222	438
		725852	OHIO	3	5	12060	3.3	392							
			ILLINOIS	2	2	8845	4.0	355							
			WISCONSIN	39	118	11775	3.7	431	2	7	13433	464	1	10747	376
			MINNESOTA	3	10	12332	3.4	416	1	5	12448	421	1	11990	409
			IOWA	1	1	10570	3.9	416							
			VIRGINIA	1	1	10890	3.7	404							
			TEXAS	1	1	11030	3.4	376							
			IDAHO	2	7	13734	3.6	482							
013	GUER	282240	MINNESOTA	5	12	8329	4.8	391	1	7	6823	309	1	6867	313
		285572	MINNESOTA	5	12	7968	4.6	365	1	7	8540	360	1	7161	312
		319810	MINNESOTA	7	23	7225	5.1	367	1	7	9578	468	4	9761	491
		320653	MINNESOTA	24	46	7368	4.4	322	3	5	9780	428	2	9917	429
	HOL.	862606	MINNESOTA	2	11	13391	3.3	440	2	7	11761	422	3	11973	438
014	GUER	275820	INDIANA	1	1	7640	4.6	352							
			WISCONSIN	2	6	9765	4.5	433							
			MINNESOTA	1	1	6530	4.6	300							
		276914	WISCONSIN	1	7	8571	5.3	452							
			MINNESOTA	1	4	7148	5.5	395	1	2	6473	344	2	6551	325
		282316	WISCONSIN	3	7	6901	4.6	316	3	6	8090	390	1	9003	421
			MINNESOTA	7	20	7067	4.7	331	4	6	8203	399	3	8516	394
		290578	INDIANA	1	3	6747	5.3	360	1	2	8570	385	2	7794	365
			WISCONSIN	3	5	6830	5.7	384	1	9	6970	336			
		291832	WISCONSIN	12	23	7571	5.0	376	9	6	8450	389	2	8918	414
			MINNESOTA	34	93	6930	5.2	356	31	9	8042	374	2	8016	372
		295627	MINNESOTA	3	3	5810	5.5	326	2	10	8630	425	1	8589	436
		295840	MICHIGAN	1	7	8953	4.7	418	1	2	10216	509	2	9908	492
			WISCONSIN	1	1	8430	4.4	373	1	9	6750	333	1	6224	303
			MINNESOTA	2	7	8439	4.7	371	2	7	7271	359	3	7962	379
		296283	WISCONSIN	1	4	7245	5.3	383	1	10	7535	391	3	7557	403
		297678	MINNESOTA	1	3	8733	4.2	362	1	10	7520	367	1	8197	402
		302187	WISCONSIN	2	4	4917	4.9	240	2	10	7114	344			

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAUS.	CONTEMPORARY NO.	AV. MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	MILK LB.	AV. FAT LB.
	303546	WISCONSIN MINNESOTA	3 8	8 20	6527 7004	5.1 4.7	337 326	1 7	5 12	8520 7387	402 341	1 2	9003 7731	421 366
	306982	WISCONSIN MINNESOTA	13 9	33 27	7493 6721	4.8 4.9	360 325	12 8	7 10	7698 7214	379 356	2 2	8072 7407	403 362
	310137	WISCONSIN MINNESOTA	1 6	1 14	7120 8067	3.5 4.8	247 386	1 4	4 7	7810 8564	381 386	1 3	8458 8176	407 389
	332309	WISCONSIN	6	14	5517	4.9	268	4	8	9113	386	2	8133	351
	335156	WISCONSIN MINNESOTA NORTH DAKOTA	11 20 1	22 41 3	7480 7760 6930	4.9 4.7 5.3	370 362 367	10 19 1	7 8 6	7936 8369 8847	400 395 463	2 2 3	8589 7784 9251	433 373 459
	337861	WISCONSIN MINNESOTA	7 12	13 25	8263 8220	5.4 4.9	444 400	3 12	9 8	7527 7599	370 373	1 2	8644 7868	442 380
	338835	WISCONSIN MINNESOTA	1 2	3 4	7460 8513	5.4 4.4	397 375	1 2	19 5	7927 8763	410 400	2 2	9113 8159	464 391
	348120	MINNESOTA	4	16	7251	5.1	361	4	7	8302	404	2	7941	376
	349288	WISCONSIN MINNESOTA NORTH DAKOTA	1 2 1	1 4 2	6880 7723 8790	5.3 4.6 4.8	368 348 423	1 2 1	18 8 13	8330 8025 9125	454 390 404	1 2 1	8753 7772 9886	467 372 403
	352695	WISCONSIN MINNESOTA IOWA NORTH DAKOTA	13 22 1 2	33 50 1 8	8262 8274 10760 8226	4.8 4.7 4.8 5.2	396 384 517 409	12 21 1 2	9 8 25 6	8617 7867 9030 7919	418 383 441 360	2 2 2 4	8847 8094 8700	440 399 399
	358118	WISCONSIN MINNESOTA KANSAS	4 6 1	5 14 1	8065 7393 8310	4.9 4.8 5.2	397 352 429	4 5	7 4	8360 8085	379 380	1 1	7625 8203	370 385
	359066	WISCONSIN MINNESOTA NORTH DAKOTA	5 23 1	15 48 1	7854 7600 5900	4.9 4.8 4.9	387 365 286	3 22 1	14 10 5	7878 8134 9310	386 374 483	2 2 1	8815 8295 9647	432 384 474
	361533	MINNESOTA	2	4	7827	4.9	376	2	15	9314	433	2	9255	414
	361559	WISCONSIN MINNESOTA	10 14	18 31	7585 6964	5.1 4.9	382 341	7 14	10 10	7681 8130	389 395	2 2	8146 7773	415 381
	373258	INDIANA MINNESOTA	1 8	1 20	7660 6732	5.3 5.6	406 373	1 7	10 8	9180 7984	468 395	1 2	8469 7682	434 382
	378833	MINNESOTA	3	8	6660	5.2	337	3	13	10893	408	3	11454	421
	384338	WISCONSIN	1	1	5460	3.8	209	1	6	7210	349	1	8840	411
	385258	WISCONSIN MINNESOTA	3 2	4 5	5855 7697	5.1 4.9	300 378	3 2	11 13	8538 7412	396 374	1 2	9016 7178	406 363
	393057	MINNESOTA	2	2	8105	5.0	396	2	9	9090	360	1	8317	401
	393398	WISCONSIN MINNESOTA	2 1	3 5	7720 7904	5.4 5.0	413 397	1 1	5 19	9410 9212	433 461	1 5	7445 8362	403 412
	395047	MAINE WISCONSIN MINNESOTA NORTH DAKOTA	1 5 21 1	1 6 45 3	13190 6898 7028 9837	5.4 5.5 5.2 5.3	709 374 367 516	3 18 1	12 9 5	8757 7944 8920	434 392 453	1 2 3	9199 7790 9272	471 377 464
	417592	WISCONSIN MINNESOTA	2 18	4 29	7864 7174	5.2 4.7	410 337	10	32	8762	393	1	9302	399
	426885	MINNESOTA	1	1	10850	4.6	496	1	7	10750	469	1	9712	472
	451828	WISCONSIN MINNESOTA	1 2	2 3	5820 7320	5.3 4.9	309 364	1 2	16 4	7690 6753	396 353	1 2	8208 7886	448 387
HOL.	703951	MINNESOTA	1	1	6450	3.1	202							
	725440	WISCONSIN	4	15	12981	3.4	435	3	6	11736	426	3	12160	437
	750270	MASSACHUSETTS PENNSYLVANIA OHIO MICHIGAN WISCONSIN MINNESOTA NORTH DAKOTA NORTH CAROLINA	1 1 1 1 26 73 1 1	3 3 1 2 60 201 2 1	13870 11487 8090 10315 11695 11144 14765 8560	4.1 3.7 3.5 3.9 3.6 3.7 3.7 3.7	566 424 283 403 423 407 549 314	1 1 1 1 26 63 1 1	11 14 3 9 9 12 5 22	13717 11200 14180 12040 11768 13905 10600	506 400 494 450 422 469 390	1 1 1 2 2 1 1	16306 12862 13690 11684 11647 12938 10104	595 463 470 438 418 455 377

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BRED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY NO. RECORDS	DAUS.	MILK LB.	FAT LB.	YEARLY HERD RECORDS NO.	MILK LB.	AV. FAT LB.
	752584	WISCONSIN MINNESOTA NORTH DAKOTA	6 26 1	8 81 1	13719 12381 13030	3.5 3.4 3.4	475 412 440	5 23	14 9	12665 12168	448 438	1 2	14972 12047	531 430
	764393	MINNESOTA	46	113	9909	3.5	348	8	9	11011	392	2	10584	383
	769488	WISCONSIN	1	5	13126	3.9	510	1	10	12660	456	2	13140	482
	771582	PENNSYLVANIA WISCONSIN MINNESOTA NORTH DAKOTA NEBRASKA	2 9 40 2 1	5 28 101 8 1	10647 10934 11384 8996 10290	3.9 4.1 3.8 4.0 3.4	406 445 426 357 348	2 5 38 2	11 11 11 7	12063 11526 11796 10800	460 405 420 384	3 2 2 3	14341 12088 11677 10273	551 423 417 370
	778021	MINNESOTA	12	40	12298	3.4	418	9	8	12024	431	2	12168	436
	786840	MINNESOTA COLORADO	8 1	29 4	13350 12845	3.6 3.5	483 442	4 1	8 21	12651 10673	454 389	1 1	11634 10442	412 377
	791357	WISCONSIN MINNESOTA NORTH DAKOTA	3 24 1	7 87 1	10139 12252 10530	3.7 3.6 2.8	376 436 293	3 21	7 7	10924 11928	377 430	1 2	10442 11342	363 412
	813542	MINNESOTA	4	11	10298	3.5	355	1	7	11493	403	2	11069	400
	820661	WISCONSIN MINNESOTA IOWA NORTH DAKOTA	5 38 1 2	9 123 1 8	11486 11726 10670 10380	3.4 3.5 4.1 3.5	392 409 439 352	2 34 1 1	9 8 13 9	13390 11522 12480 11279	467 412 450 393	2 1 1 3	11519 12840 11078	412 477 382
	824237	WISCONSIN MINNESOTA NORTH DAKOTA	15 84 6	31 241 14	10506 11194 11256	3.4 3.5 3.5	354 390 384	10 81 4	13 9 9	12003 11345 11503	426 408 409	1 2 3	11416 11365 11445	402 408 401
	825625	WISCONSIN MINNESOTA	3 14	13 40	9454 10389	3.6 4.0	341 409	3 12	7 6	11530 11398	425 423	2 2	9911 11227	362 417
	828627	WISCONSIN MINNESOTA MISSOURI	1 9 1	1 23 3	9380 10600 8867	3.1 3.6 3.8	294 380 335	1 6	4 11	12460 11832	388 405	3	11664	401
	831861	PENNSYLVANIA MICHIGAN WISCONSIN MINNESOTA NORTH DAKOTA	1 1 9 54 5	4 2 21 152 14	12820 12375 12645 11653 11554	3.4 3.3 3.5 3.4 3.4	440 397 443 392 392	1 8 46 3	3 10 8 8	7317 12764 11698 11453	282 439 419 407	3 3 2 2	9497 12109 11678 11326	374 419 414 396
	834649	WISCONSIN MINNESOTA NORTH DAKOTA UTAH	10 44 2 1	19 100 6 3	13301 10451 11018 10987	3.8 3.6 3.6 3.8	492 371 393 417	10 30 1 1	8 8 5 16	12762 11311 11480 11763	458 406 391 434	2 2 3 2	13447 11022 11078 11892	475 393 382 432
	841585	WISCONSIN MINNESOTA NORTH DAKOTA	1 8 1	2 19 2	9185 10794 15025	3.4 3.5 3.1	307 371 465	1 7 1	5 11 12	10355 12068 11515	366 419 418	2 2 2	10116 11991 11244	367 417 397
	843189	WISCONSIN	1	1	10770	3.3	360							
	843302	WISCONSIN	1	3	13917	3.4	483	1	8	12393	445	2	12988	476
	848258	WISCONSIN MINNESOTA	2 12	4 31	9890 10429	3.4 3.6	325 369	2 5	9 7	10888 10293	370 366	1 1	10181 11192	339 396
	851894	MINNESOTA	11	38	11795	3.5	413	11	7	11163	413	2	10992	400
	858562	MINNESOTA NORTH DAKOTA	7 1	15 7	11427 12816	3.5 3.8	394 494	3 1	8 11	10970 11864	399 428	1 4	11367 11592	414 402
	863423	WISCONSIN MINNESOTA	1 1	1 5	8600 12306	3.6 3.7	307 455	1	11	12133	438	1	10900	382
	868927	WISCONSIN MINNESOTA NORTH DAKOTA	2 28 2	4 74 7	12519 12133 11711	3.6 3.5 3.6	456 420 419	2 25 2	12 7 6	10929 12108 11535	412 422 409	2 2 3	12503 12260 12281	459 427 435
	872945	WISCONSIN MINNESOTA IOWA NORTH DAKOTA	31 147 1 5	49 268 1 9	12043 11008 13710 11825	3.5 3.7 3.8 3.5	420 401 514 414	30 134 1 5	11 11 2 8	12870 11811 9190 13137	462 428 398 461	1 2 2	13058 11674 11775	470 426 410
	877488	WISCONSIN MINNESOTA	1 2	2 2	10090 13125	4.0 3.8	398 501	1 2	7 20	10175 10510	374 368			
	882276	WISCONSIN	1	4	10268	3.7	384	1	7	11510	413			

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY NO.	AV. MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
	887669	MINNESOTA	10	50	11734	3.8	441	8	6	12425	424	3	11698	415
	891547	WISCONSIN	6	12	9613	3.9	378	6	9	10629	380	2	10790	385
		MINNESOTA	23	51	11402	3.7	427	18	22	11428	422	3	11218	415
		NORTH DAKOTA	1	2	12890	3.7	478	1	9	10235	363	2	10562	362
	901196	PENNSYLVANIA	3	3	10507	3.7	394	3	10	11093	412	1	12840	476
		WISCONSIN	26	40	11820	3.8	451	23	9	12933	480	1	12742	474
		MINNESOTA	116	236	11138	3.7	409	112	11	11983	430	2	12109	439
		IOWA	1	3	13663	4.3	594	1	4	14890	523			
		NORTH DAKOTA	3	5	11081	3.6	399	3	10	12272	431	1	11013	381
		SOUTH DAKOTA	1	1	8710	3.2	279	1	18	11810	401			
	905404	WISCONSIN	29	56	11712	3.6	424	20	10	12305	434	2	12196	438
		MINNESOTA	106	212	11005	3.8	413	92	12	11458	415	2	11596	424
		NORTH DAKOTA	10	14	9588	3.7	352	5	9	11515	406	2	11410	397
	930172	MINNESOTA	1	1	7820	4.0	316							
	939595	WISCONSIN	8	21	13420	3.9	522	8	9	13312	514	1	11796	485
		MINNESOTA	1	1	8960	4.4	394							
	982049	WISCONSIN	1	1	8790	4.4	386	1	16	12920	466			
		MINNESOTA	9	15	11825	4.0	468	8	7	13552	491	2	12967	467
		NORTH DAKOTA	2	5	9968	3.7	361	2	5	14021	476	2	11296	407
	982552	WISCONSIN	3	6	10299	3.6	368	3	11	11237	397	2	10015	342
		MINNESOTA	13	35	11318	4.0	447	12	11	11445	430	2	11868	438
	992848	WISCONSIN	4	5	13071	3.5	453	4	11	12388	455	1	11475	424
		MINNESOTA	4	6	10421	3.9	394	4	12	11993	453	2	11275	436
		IOWA	1	1	13230	4.0	524	1	14	12810	478	1	10322	393
	1007029	PENNSYLVANIA	1	1	9560	3.3	311	1	35	13220	495	1	13353	513
		WISCONSIN	15	24	11505	3.8	431	13	10	13395	495	1	13242	489
		MINNESOTA	33	56	10948	3.6	389	29	13	11913	431	2	11307	421
		NORTH DAKOTA	9	14	11293	3.7	412	9	8	12862	458	1	12266	439
	1016135	WISCONSIN	4	8	12446	3.7	464	4	13	13716	538	2	13196	520
		MINNESOTA	11	16	11491	3.5	398	9	9	11483	411	1	12090	427
		NORTH DAKOTA	1	1	10260	3.8	393	1	5	17380	581	1	13908	479
	1024958	WISCONSIN	2	2	12045	3.8	452	1	14	13900	481	1	13396	465
		MINNESOTA	21	36	10415	3.8	392	15	11	11240	410	2	10650	394
		NORTH DAKOTA	2	2	10770	3.4	354	1	9	11490	400	1	10878	376
	1205412	WISCONSIN	2	2	11130	3.8	425	2	8	12485	491	1	13287	523
	1214435	ILLINOIS	1	1	12100	3.0	368	1	9	9560	328	1	10126	358
		WISCONSIN	9	9	12328	3.9	482	9	5	12326	477	1	12967	511
JER.	381020	MINNESOTA	6	35	6910	4.9	340							
	399328	ILLINOIS	1	4	9410	5.8	550	1	8	9368	506	4	9587	498
		WISCONSIN	6	13	7437	6.2	456	6	12	9003	515	1	8568	496
	404389	MINNESOTA	4	7	8342	5.6	466	3	8	9736	499	2	7974	425
	426850	MINNESOTA	3	10	6883	5.0	346	3	4	7043	334	2	7158	371
	427546	MAINE	2	9	8701	5.1	438							
		RHODE ISLAND	1	2	7850	5.9	461							
		WISCONSIN	5	11	8076	5.1	407	3	8	8197	443	1	8742	455
		MINNESOTA	34	92	7308	5.1	370	23	7	7946	407	2	8105	410
	430288	WISCONSIN	6	12	6469	5.5	352	5	17	7218	384	2	7211	399
		MINNESOTA	25	64	6894	5.2	358	16	9	7762	399	2	7725	395
	443390	MINNESOTA	3	5	6097	5.9	362	3	7	6765	381	1	6943	384
	450797	WISCONSIN	6	19	7361	5.2	383	6	17	6876	377	3	6996	377
		MINNESOTA	1	3	8900	5.4	479	1	15	7953	417	3	7310	385
	452663	MINNESOTA	2	6	7327	5.4	393	2	6	8476	452	1	8306	466
	458347	WISCONSIN	1	2	6380	4.8	308	1	4	6520	293			
		MINNESOTA	1	3	6713	5.2	354	1	5	6263	306	2	6639	344
	461327	WISCONSIN	1	2	8365	5.3	438							
		MINNESOTA	3	3	9960	4.6	453	2	5	8425	442	1	8731	460
	463846	MINNESOTA	16	50	6129	5.4	329	8	9	8287	429	3	8161	421
	466294	WISCONSIN	1	1	5050	5.3	270	1	20	9550	408			
		MINNESOTA	3	7	6745	5.1	341	1	11	7960	414	1	6377	338

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				AV. RECORDS NO.	YEARLY MILK LB.	HERO FAT LB.	AV. FAT LB.
									NO. O.A.U.S.	RECORDS NO.	MILK LB.	FAT LB.				
8. S.		475546	WISCONSIN	1	3	8547	5.9	504	1	10	8330	470	3	8349	465	
		493025	MINNESOTA	5	12	7853	5.4	392	3	7	7853	383	2	7979	402	
		503552	WISCONSIN	6	21	8032	5.0	398	6	6	7906	408	3	7575	407	
			MINNESOTA	5	12	7414	6.0	438	5	10	7573	415	2	8222	443	
		526408	OHIO	1	2	6295	5.1	316								
		530610	MINNESOTA	1	1	10200	4.9	499	1	5	8470	427	1	9102	493	
		42042	MINNESOTA	4	5	10266	3.9	397	2	5	9865	371	1	10758	421	
			NORTH DAKOTA	8	19	9840	4.0	384	5	8	9933	408	2	9089	362	
		48945	WISCONSIN	3	4	12577	3.9	491	3	8	10357	441	1	12284	505	
			MINNESOTA	8	17	10348	4.0	411	7	11	10594	406	2	9966	386	
		59132	NORTH DAKOTA	1	1	5440	4.1	226								
		68357	WISCONSIN	1	1	12000	4.2	503	1	8	11260	467	1	12284	505	
			MINNESOTA	2	3	10278	4.1	428	1	2	10970	446	1	10214	421	
			NORTH DAKOTA	1	1	8450	3.8	319	1	13	11390	425				
		69157	MINNESOTA	1	2	9280	3.7	345								
		80036	MINNESOTA	3	9	8991	3.9	352	2	9	11454	433	2	10851	413	
			NORTH DAKOTA	1	3	4960	4.1	201								
		87984	WISCONSIN	4	5	9734	4.1	399	3	6	10708	450	1	12013	495	
H. SH			MINNESOTA	8	13	11732	3.7	430	7	16	10504	415	2	10188	444	
			NORTH DAKOTA	1	2	10855	4.2	457	1	11	9635	383	2	8998	361	
		18910	WISCONSIN	2	4	9699	4.0	389	2	6	10839	413	2	8126	307	
			MINNESOTA	6	9	6832	4.1	278	4	9	7276	279	1	6617	256	
		33409	MINNESOTA	4	13	8308	3.4	285	3	10	9309	341	4	8708	323	
		64218	WISCONSIN	1	3	8840	4.3	382	1	15	10260	398	2	10481	406	
			MINNESOTA	2	7	6395	4.4	277	1	12	7467	293	6	6911	268	
		106779	MINNESOTA	1	1	11190	4.5	503								
			IOWA	1	1	7010	3.3	234	1	4	8200	309				
015	GUER	336004	MINNESOTA	4	8	8138	4.4	360	3	4	7913	371	3	8075	374	
		439589	MINNESOTA	5	8	8306	4.9	404	5	12	8045	389	2	8374	405	
		814564	MINNESOTA	2	6	12898	3.3	425	2	9	13173	451	3	12147	419	
		852926	MINNESOTA	69	155	11320	3.7	417	52	7	10901	400	2	10752	399	
			NORTH DAKOTA	9	22	8410	3.9	320	8	7	8872	329	2	9615	350	
		863177	MINNESOTA	31	71	11693	3.6	422	27	8	11354	416	2	11550	423	
			NORTH DAKOTA	2	7	10216	3.7	371	2	5	11646	417	2	11874	425	
		877452	MINNESOTA	12	26	9526	3.7	350	10	5	11769	414	2	11570	402	
			NORTH DAKOTA	2	4	6850	4.1	277	1	4	8643	332	3	8808	322	
		902936	MINNESOTA	4	8	11228	3.4	379	1	9	9707	375	3	9389	354	
		922908	MINNESOTA	2	2	11675	3.8	436	2	9	10275	376	1	10540	390	
		923231	MINNESOTA	6	19	12713	3.6	449	6	10	13248	476	3	12426	440	
		948558	MINNESOTA	1	2	14245	3.5	489	1	12	12990	462	1	13320	483	
		956307	MINNESOTA	4	7	14333	3.5	492								
		959159	MINNESOTA	53	114	10151	3.8	379	42	8	10861	398	2	10900	396	
			NORTH DAKOTA	1	3	8970	4.1	365	1	9	8720	331	2	9396	336	
		959160	MINNESOTA	1	3	8173	3.8	304								
		1047020	MINNESOTA	16	18	11163	3.7	408	15	8	12517	457	1	11776	427	
		1051100	MINNESOTA	5	12	10569	3.8	400	5	9	11525	416	2	10956	400	
016	GUER	224987	MINNESOTA	2	10	7704	5.1	387								
		697637	MINNESOTA	3	8	14596	3.1	453								
017	GUER	250298	MINNESOTA	3	4	7118	4.7	331								
			IOWA	1	2	6735	4.2	282								

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				AV. YEARLY HERO		
								NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
HOL.	257582	INDIANA	1	1	4230	5.1	214							
		ILLINOIS	12	33	8090	4.8	389	3	5	9887	425	2	8818	403
		WISCONSIN	47	107	6956	5.0	344	27	10	8138	373	1	8648	404
		MINNESOTA	15	42	7611	4.9	364	14	9	8075	369	2	8391	379
		ARKANSAS	1	1	6090	5.0	305							
	267795	MINNESOTA	5	13	6874	4.9	337	1	3	8800	420			
	278547	MINNESOTA	1	3	9623	4.6	443							
	283563	MINNESOTA	9	35	8494	4.6	383	5	8	7972	389	2	8400	417
	316166	MINNESOTA	2	6	6573	4.5	295	1	8	7334	348	3	7183	342
	323181	MINNESOTA	7	16	7959	5.1	398	2	6	8610	413	2	8731	426
	331097	MINNESOTA	29	72	8247	4.8	396	26	11	8247	388	2	7925	372
		IOWA	3	6	9863	4.9	479	3	7	8156	411	1	8502	428
	340519	MINNESOTA	1	2	5880	4.6	273							
	357719	MINNESOTA	5	12	7834	4.5	351	1	27	9430	399	1	8088	358
	386829	MINNESOTA	3	4	7583	5.2	391	2	15	10933	462	2	11015	466
	428625	MINNESOTA	10	16	7313	4.6	335	6	7	7676	369	2	7654	374
	438181	WISCONSIN	1	1	10000	4.9	494	1	20	9230	390	1	9505	402
		MINNESOTA	1	2	9055	4.7	425	1	6	10200	451	2	9914	469
	768546	MISSOURI	1	1	5270	4.3	228							
		NEBRASKA	1	3	8260	4.2	351							
	816451	MINNESOTA	2	2	8975	4.0	358							
	828803	MINNESOTA	378	1031	11352	3.7	416	338	13	11767	423	2	11690	423
		IOWA	6	8	12269	3.8	457	5	8	11684	429	1	11204	411
		MISSOURI	1	2	14885	3.8	565	1	5	16285	589	2	14737	542
		NORTH DAKOTA	3	12	11838	3.5	405	3	8	12066	412	3	11621	390
		NEBRASKA	1	2	9115	3.8	341	1	3	12885	490	2	10693	404
		KANSAS	1	2	10300	3.8	389							
		WASHINGTON	1	1	11140	4.0	442	1	7	12250	433			
	839322	WISCONSIN	1	1	15160	3.9	586	1	28	13420	478	1	12208	438
		MINNESOTA	82	147	12025	3.8	457	78	19	12470	452	2	12039	443
		IOWA	3	6	13862	4.1	564	3	30	15172	542	2	11668	568
	845267	OHIO	1	2	8895	3.2	286	1	13	11535	400	1	10802	372
		WISCONSIN	3	6	13049	3.2	412	3	13	11594	394	1	11603	397
		MINNESOTA	259	610	11622	3.5	403	189	12	11761	420	2	11506	411
		IOWA	3	7	12016	3.6	430	2	12	10040	372	2	9898	360
		NORTH DAKOTA	2	4	9012	3.3	292	2	13	10862	403	2	9878	354
		NEBRASKA	1	3	8203	3.6	299							
	865315	MICHIGAN	1	1	7910	3.8	300	1	3	11360	414	1	11314	425
		MINNESOTA	91	181	11220	3.8	421	89	17	12068	435	2	11896	430
		IOWA	3	5	13402	3.7	488	3	26	14985	538	2	13114	524
		MISSOURI	1	3	12160	3.6	439	1	31	12953	467	2	13549	504
	873313	MINNESOTA	125	230	12000	3.6	426	58	21	12650	459	2	11928	439
		IOWA	1	3	13903	3.9	550							
		MISSOURI	1	2	16310	3.6	584	1	33	12155	434	1	11718	429
		KANSAS	2	4	14145	3.6	508	1	3	11707	415	1	11489	421
	892874	MINNESOTA	14	36	11580	3.4	392	13	11	11621	421	2	11897	422
		NORTH DAKOTA	2	8	11480	3.6	404	2	9	10994	391	4	10271	360
	895906	PENNSYLVANIA	1	5	11096	3.6	402	1	15	12650	418			
		OHIO	1	6	14272	3.5	492	1	6	12193	425	2	11772	411
		WISCONSIN	1	1	16590	4.0	655	1	17	13380	540	1	13941	552
		MINNESOTA	337	913	12231	3.5	427	282	13	11833	426	2	11686	420
		IOWA	3	8	13391	3.7	481	3	4	12071	408	3	13225	463
		NORTH DAKOTA	3	6	10197	3.5	353	2	14	11033	395	3	10330	369
		NEBRASKA	1	1	10600	3.3	348							
	921324	MINNESOTA	17	55	11610	3.5	410	6	14	10459	371	3	10411	374
	925549	WISCONSIN	1	1	14690	3.6	522	1	11	13020	443	1	13135	467
		MINNESOTA	67	122	10466	3.8	398	64	15	12214	444	2	11772	426
		IOWA	1	4	11243	4.2	470	1	27	14525	524	3	15398	541
		KANSAS	1	3	12880	4.0	514	1	3	11373	382	2	10710	404
	944771	MINNESOTA	50	128	11720	3.6	415	48	15	11996	432	2	11708	427
		WASHINGTON	1	3	14417	3.5	512	1	36	15200	541	2	15598	554

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV.			YEARLY HERD			AV. FAT LB.
									NO.	RECORDS	MILK LB.	FAT LB.	RECORDS	MILK LB.	NO.	RECORDS	MILK LB.	
		948425	MINNESOTA	100	210	11854	3.5	419	98	16	11976	432	2	11631	428			
			IOWA	1	5	17110	3.5	606	1	17	14498	525	4	15658	549			
			NORTH CAROLINA	1	3	15753	3.3	519	1	10	12587	488	1	16753	593			
		951104	OHIO	1	2	7260	3.3	241	1	13	12795	476	1	11500	410			
			MINNESOTA	125	209	10834	3.7	397	123	15	11893	432	2	11622	425			
			IOWA	9	12	9684	3.9	375	2	25	14465	522	2	15173	530			
			MISSOURI	1	1	10950	3.7	407	1	28	14370	525	1	15380	579			
		1013717	WISCONSIN	1	2	11650	3.6	411	1	8	11645	400	2	10404	374			
			MINNESOTA	45	134	12279	3.5	426	45	13	12148	440	3	12359	448			
			IOWA	5	10	9895	3.6	358	5	8	10433	379	2	9194	329			
		1047769	WASHINGTON	1	1	10140	3.6	362	1	7	9400	352	1	9777	366			
			OREGON	20	22	13648	3.7	493	19	26	13351	506	1	12343	482			
		1048029	MINNESOTA	6	9	12055	3.5	428	6	14	12044	427	2	12614	457			
		1054495	MINNESOTA	77	140	11642	3.4	398	75	14	12031	435	2	11889	429			
			IOWA	2	7	11638	3.7	429	2	17	12448	459	3	13752	506			
	JER.	392431	MINNESOTA	3	19	7665	5.4	408	1	3	10137	505	1	8993	482			
		403441	MINNESOTA	1	7	8670	4.9	425	1	3	7848	440	2	8677	441			
	M. SH	2036764	MINNESOTA	1	2	9270	4.5	417										
			IOWA	1	1	7200	3.6	259										
		2061092	MINNESOTA	2	2	10705	3.6	377										
			IOWA	1	2	7220	3.4	248										
019	GUER	310151	MINNESOTA	2	2	10035	4.2	420										
		357911	MINNESOTA	2	5	8716	5.3	461	2	5	8711	389	1	9341	451			
	HOL.	956101	MINNESOTA	2	5	13241	3.5	458	1	12	12533	412	1	12633	426			
020	HOL.	808233	MINNESOTA	2	4	12930	3.7	464										
		904550	MINNESOTA	18	31	11869	3.6	429	18	13	12692	438	1	12595	437			
022	GUER	227367	MINNESOTA	1	5	7230	5.3	386										
	HOL.	952635	NORTH CAROLINA	1	12	11963	3.5	423	1	12	12200	433	7	11851	429			
075	HOL.	1022095	VERMONT	1	1	13750	3.6	489	1	9	11270	448	1	13265	461			
			NEW YORK	5	5	12746	3.7	462	3	27	14077	547	1	14294	525			
			OHIO	1	1	4390	3.7	161	1	2	4660	188						
			INDIANA	1	1	12360	3.6	439	1	27	11800	436						
			ILLINOIS	22	27	12292	3.6	459	21	14	12656	462	1	12636	463			
			MICHIGAN	10	10	12604	3.8	485	9	13	12131	460	1	13314	500			
			WISCONSIN	41	56	12426	3.8	472	40	16	12613	471	1	12817	478			
			MINNESOTA	27	40	13507	3.7	497	27	20	13334	487	1	12724	482			
			IOWA	1	2	10450	4.2	435	1	33	9560	336	2	5194	327			
			MISSOURI	13	37	13956	4.1	567										
	JER.	454147	NEW JERSEY	8	20	9543	5.6	536	2	2	10977	575	3	9730	540			
			PENNSYLVANIA	4	11	8083	5.3	425	1	9	7920	404						
			INDIANA	5	6	7211	5.6	402	2	5	8190	427	1	8600	441			
			WISCONSIN	1	1	6540	5.8	379										
			NORTH CAROLINA	5	15	7837	5.4	421	4	22	7606	579	4	7465	357			
			GEORGIA	5	6	8715	5.0	430	3	17	8430	423	1	9745	476			
			FLORIDA	6	10	9421	5.1	478	2	56	8198	408	2	7958	400			
			MISSISSIPPI	1	2	5725	5.9	337	1	51	6460	333						
		475541	NEW YORK	29	42	8668	5.3	457	13	47	8883	466	1	8871	460			

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY		AV. NO.	YEARLY HERO		AV. NO.
									NO. OAS.	RECORDS NO.		MILK LB.	FAT LB.	
000	B. S.	61485	IOWA	1	2	10570	3.7	386						
001	AYR.	96258	IOWA	2	3	9228	3.8	358	2	17	8675	305	2	7794 278
	GUER	294227	IOWA	1	1	8580	4.5	386						
		349935	IOWA	1	1	8880	4.6	408						
		376904	IOWA	7	14	8042	4.7	378	6	4	8263	410	2	8105 401
		379227	IOWA	1	1	5230	5.1	266						
		382747	MINNESOTA	1	2	7030	4.8	336						
			IOWA	1	1	5460	6.4	351						
		389449	IOWA	1	5	6596	4.5	300	1	10	8198	416	5	8269 381
		407335	IOWA	5	9	6952	5.2	357	1	4	9000	474	1	7924 393
		418003	IOWA	4	10	7690	4.9	381	4	5	9638	416	2	7588 347
	HOL.	702939	ILLINOIS	1	1	12780	3.3	422						
			IOWA	20	51	13831	3.5	480	1	4	14300	526		
		730541	MINNESOTA	1	3	10077	3.6	364						
			IOWA	1	1	14000	3.5	489						
		786324	IOWA	37	105	12664	3.5	445	18	5	12390	432	2	11924 417
		786905	MINNESOTA	2	2	10030	3.4	335	1	7	10900	388	1	11423 422
			IOWA	7	22	14492	3.4	492	1	9	15960	528		
		815275	MINNESOTA	3	9	9557	3.5	322	3	8	10506	383	3	11008 402
			IOWA	64	175	12760	3.5	447	57	6	13238	462	2	12377 438
			KANSAS	1	2	11705	3.4	400						
		863227	IOWA	2	4	14417	3.3	474						
		889586	IOWA	4	11	12580	3.5	443						
		892538	IOWA	2	3	11153	3.6	391	2	3	12663	419	1	11794 407
		895364	MINNESOTA	1	1	11200	3.4	378						
			IOWA	2	4	12115	3.8	447						
		899834	IOWA	2	3	11585	3.7	419						
		901453	MINNESOTA	1	3	15700	3.2	504						
			IOWA	1	4	11970	3.6	429						
		926104	IOWA	24	39	14276	3.5	495	23	7	14614	507	2	13982 488
		939181	MINNESOTA	2	5	16512	3.6	601	2	7	15224	520	2	13941 484
			IOWA	48	111	13881	3.5	480	41	9	12980	459	2	12512 447
		941953	MINNESOTA	1	2	14130	3.4	474	1	18	13665	492	2	14519 507
			IOWA	24	46	12209	3.5	419	22	8	13611	481	2	12759 457
			COLORADO	1	1	9380	3.9	362	1	46	9990	361	1	10442 377
		981711	MINNESOTA	1	1	5950	3.9	232	1	13	12500	433	1	11347 405
			IOWA	70	111	12382	3.6	443	61	8	13540	474	1	12938 459
		985717	IOWA	21	32	12399	3.4	414	20	9	12687	456	1	11745 419
		1006529	IOWA	16	37	13581	3.5	476	15	11	13453	475	2	12427 446
			NEBRASKA	1	1	13030	3.7	487	1	7	12980	472	1	12284 472
		1009468	IOWA	68	148	14135	3.4	485	65	8	13466	471	2	12979 460
			NEBRASKA	1	5	13306	3.4	460	1	25	12460	454	4	11538 423
		1024956	IOWA	14	32	15101	3.3	492	4	9	14709	525	2	13842 482
			KANSAS	2	2	11445	3.4	403	2	15	13455	460		
		1041898	IOWA	10	14	12266	3.5	427	9	8	13708	488	1	12404 471
		1124811	NEW JERSEY	1	1	14540	3.7	538						
			MINNESOTA	1	1	14080	4.0	570	1	17	11130	403		
			IOWA	13	18	13323	3.6	474	7	13	13184	460	1	13356 463
			KANSAS	1	1	9530	4.0	381						
		1145608	IOWA	6	7	14756	3.7	553	4	5	13273	495	1	12925 476
		1173338	IOWA	3	3	12610	3.6	479	3	12	13593	515	1	13527 514

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				AV. YEARLY HERD		
								NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
B. S.	1225113	IOWA	6	9	14266	3.5	494	5	10	14089	507	2	12783	484
	1238361	IOWA	1	1	15180	3.3	496	1	6	17460	588	1	16328	522
	45361	IOWA	7	12	9513	4.5	423							
	49075	IOWA	2	3	8628	4.3	369							
		TEXAS	1	1	9140	4.3	393							
	49626	IOWA	2	2	9665	4.1	393							
	53291	IOWA	9	17	9971	4.0	396	5	8	11056	444	2	10400	419
	62622	IOWA	2	2	10710	4.9	512							
	63813	IOWA	6	19	9405	4.1	385	4	5	11330	462	2	9576	400
	73423	IOWA	16	24	11920	3.9	461	14	6	11274	451	1	10498	424
	79828	IOWA	8	13	11553	4.0	455	7	5	12494	506	2	9963	403
		IDAHO	1	2	6765	4.0	269	1	5	9605	406	2	9053	381
	85201	IOWA	11	19	9923	4.1	403	10	5	10768	434	1	10212	409
		NORTH DAKOTA	1	1	6530	3.9	257	1	21	9870	404			
	96003	IOWA	8	14	10050	4.2	417	6	6	10267	424	2	10120	418
M. SH		IDAHO	1	1	7410	3.9	292	1	9	9170	387	1	9559	401
	103450	IOWA	5	6	9622	4.1	396	4	8	10860	423	1	10549	425
		NORTH DAKOTA	1	1	13330	3.7	493	1	27	11080	451			
	6491	WISCONSIN	1	1	8060	4.0	323							
		IOWA	1	1	4900	3.9	192							
	20308	IOWA	2	4	6948	3.9	265	2	7	7610	288	2	6742	258
	34116	IOWA	1	3	7247	3.9	286	1	10	7893	310	3	7074	274
	47947	MINNESOTA	1	1	3590	4.0	142							
		IOWA	1	1	4980	3.9	196							
	78749	IOWA	2	5	9387	4.0	376	2	8	8284	328	3	8155	318
	83260	IOWA	4	9	11167	3.8	419	4	5	8916	340	2	7100	269
	2120268	IOWA	1	1	5850	3.7	217							
	2317922	IOWA	1	2	7905	4.5	355							
	2335246	IOWA	1	1	9830	4.0	394							
002 AYR.	75943	IOWA	7	15	8274	4.0	325	5	5	8548	351	2	8160	317
	79069	IOWA	14	22	8459	4.0	333	8	5	8426	337	2	8366	333
	80257	IOWA	14	49	8562	4.0	340	13	7	8852	349	3	8452	332
	83630	MINNESOTA	3	6	10273	4.2	434	2	15	11423	451	2	11096	438
		IOWA	22	36	7960	4.1	328	21	8	9347	369	1	8206	339
	86601	MINNESOTA	3	3	9140	4.0	361	3	16	9790	398	1	10584	424
		IOWA	17	30	7979	4.2	328	16	8	8612	340	2	8323	328
		CALIFORNIA	2	3	12125	4.1	497							
	97269	MINNESOTA	1	1	9170	4.3	398	1	5	8100	333			
		IOWA	5	10	9440	4.2	397	4	6	10403	414	2	8691	349
	98643	IOWA	5	9	9103	4.2	377	4	21	9528	385	2	7688	379
		OKLAHOMA	1	1	10250	4.3	438	1	5	10950	419	1	8262	325
	99088	MINNESOTA	5	11	9119	3.8	352	5	7	9230	354	1	9487	379
		IOWA	4	5	8613	3.9	339	4	15	9248	353	1	8945	353
	101662	IOWA	3	5	7756	4.1	315	2	8	10478	449	2	7750	378
GUER	104713	IOWA	2	2	12290	4.1	505	2	2	9155	335	1	8944	366
	104833	IOWA	1	1	10820	4.3	470	1	9	11800	488	1	10170	409
	265602	IOWA	26	106	8390	4.8	399	16	5	8442	398	2	8554	402
	269123	IOWA	3	6	7790	5.1	396	2	2	8838	443	1	8339	413
	281589	IOWA	1	2	6105	5.2	312							

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD			
								NO. OAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	AV. LB.
	284597	IOWA	10	40	7732	4.7	356	9	12	8041	367	3	8051	370	
	289820	IOWA	13	43	6886	4.9	338	6	9	7999	368	2	7462	349	
	293524	IOWA	17	37	6750	4.7	319	6	7	8522	399	2	8427	388	
	303154	IOWA	36	88	8486	4.6	392	24	9	7893	372	2	8130	381	
	306647	IOWA	27	66	7358	5.1	372	21	7	8265	396	2	8081	382	
		MISSOURI	3	8	5846	5.2	312	1	8	8508	419	3	8876	443	
	309795	IOWA	43	118	7584	4.9	371	42	11	8413	391	3	8295	385	
	312210	IOWA	5	10	7044	4.9	336								
	316411	ILLINOIS	1	2	9470	4.4	416								
		IOWA	10	33	10191	4.4	445	3	6	10544	482	2	10516	505	
	319372	IOWA	2	2	4390	5.2	237	2	5	7015	305	1	6736	298	
	326212	MINNESOTA	1	6	8802	4.8	423	1	13	9933	460	4	8284	390	
		IOWA	31	91	6892	5.0	342	11	7	8013	377	2	7789	368	
	329555	IOWA	12	45	11287	5.0	566	11	7	12583	579	3	11330	552	
	335122	IOWA	1	1	5690	4.6	259								
	336247	IOWA	1	4	10185	5.2	523	1	7	9078	399	3	8931	405	
	342282	IOWA	7	18	8774	4.3	374	1	3	9670	418				
	349535	IOWA	1	2	6940	4.6	319								
	350645	IOWA	27	56	7388	4.7	349	26	9	8749	401	2	8498	385	
		MISSOURI	1	1	6370	4.7	300								
	351862	IOWA	22	48	7523	4.7	350	9	7	8473	403	2	8669	416	
		NEBRASKA	1	3	8323	4.6	381	1	21	8713	425				
	357406	IOWA	5	7	6977	4.5	315	2	9	9134	413	1	8611	438	
	360026	IOWA	2	3	7913	5.4	420	2	5	9365	423	1	9156	444	
	360912	IOWA	8	15	7260	5.0	363	8	12	7701	363	2	7510	359	
	361654	IOAHO	1	1	9330	3.9	363	1	13	9090	424	1	8927	398	
		NEW MEXICO	1	2	9700	5.3	518	1	8	11015	503	1	9211	447	
		UTAH	6	11	7271	4.9	351	4	47	9153	381	1	8448	356	
		WASHINGTON	3	11	9451	4.9	452	1	12	10003	487	2	9892	454	
	361862	IOWA	1	1	5310	4.1	219	1	10	8790	363				
	361920	IOWA	16	53	7602	4.8	363	13	8	8138	387	3	8177	375	
	362814	ILLINOIS	1	1	7260	5.9	426	1	10	8210	379				
		IOWA	12	21	7880	5.1	399	11	11	8979	410	2	8599	402	
	371682	IOWA	83	166	7473	4.8	356	75	12	8504	397	2	8278	389	
	372112	IOWA	2	2	6355	5.5	346	2	12	8390	410				
	372369	IOWA	32	54	7689	4.7	359	30	8	8240	381	2	8298	379	
		NEBRASKA	1	2	8745	5.1	444	1	35	10845	534	2	10895	541	
	373738	IOWA	52	100	7889	4.8	377	52	9	8793	401	2	8408	390	
	377882	IOWA	58	114	8298	4.7	385	53	12	8524	392	2	8214	383	
	385125	IOWA	65	88	7878	4.6	361	65	11	8714	401	1	8611	398	
	385127	IOWA	31	48	7886	4.9	387	29	10	8733	410	1	8514	398	
	387716	IOWA	3	7	7371	5.2	382	2	9	8432	411	2	8152	401	
	389518	ILLINOIS	1	2	5650	4.7	263	1	19	11350	503	1	8273	382	
		IOWA	12	26	8442	4.6	388	11	11	9096	415	2	8926	421	
	390931	IOWA	5	16	8084	4.7	371	5	6	8967	424	2	8546	404	
	393411	IOWA	9	19	7991	5.1	399	8	9	8276	375	1	8643	393	
	405045	IOWA	12	26	7661	4.7	358	11	9	8185	377	2	8070	369	
	411879	IOWA	60	96	8133	5.0	404	56	9	8827	408	2	8721	406	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREEO	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAS.	CONTEMPORARY RECORDS NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
	414633	IOWA	1	1	7820	5.4	421	1	5	8430	394			
	415071	IOWA	21	49	7562	4.9	368	19	7	8064	366	2	8301	375
		MISSOURI	1	1	6860	4.9	335	1	7	9000	436	1	7837	392
	422893	IOWA	2	2	7705	5.5	426							
	426369	ILLINOIS	1	3	10000	5.0	496	1	9	10925	533	2	10878	523
	427632	IOWA	30	39	7596	4.9	371	28	12	9118	411	1	8845	407
	428877	IOWA	27	50	7264	5.1	371	27	9	9166	406	2	8636	391
	437646	ILLINOIS	1	1	4250	4.4	186	1	10	5950	268			
		WISCONSIN	1	3	9833	4.8	476	1	10	12863	484	2	13413	521
		IOWA	4	5	8428	4.5	376	4	7	10201	466	1	9181	423
	448426	IOWA	2	2	8270	4.9	403							
	453966	IOWA	1	1	6180	5.8	357							
	458823	IOWA	14	19	8774	4.8	421	3	18	9088	417	2	7881	375
	494700	IOWA	1	2	7365	5.6	408							
	498699	IOWA	1	1	9090	5.2	477							
	498886	MINNESOTA	4	4	8168	4.9	402							
	499670	IOWA	1	1	9550	4.5	433							
HOL.	754118	ILLINOIS	3	9	13469	3.6	491	2	28	14198	524	3	13142	481
		MINNESOTA	1	2	13215	3.7	486							
		IOWA	48	134	11562	3.6	414	28	8	11653	425	2	11634	417
	774750	IOWA	6	14	11182	3.7	408	4	4	12501	482	2	10677	394
	780586	MINNESOTA	1	1	10290	3.5	358	1	6	7390	267	1	7183	264
		IOWA	116	326	12073	3.7	441	95	8	12139	434	2	11553	420
		MISSOURI	4	7	11971	3.9	458	2	16	12114	454	2	10884	415
		TEXAS	1	1	10950	3.4	377	1	18	10750	398	1	9723	389
	780863	MINNESOTA	1	1	8180	3.5	286							
		IOWA	8	24	13599	3.5	474	5	4	13542	493	1	12876	486
	788556	IOWA	2	9	11616	3.8	438	2	10	12929	456	5	14650	504
	789350	IOWA	14	44	12421	3.4	426	9	6	12674	463	3	12588	468
		COLORADO	1	2	14475	3.4	493							
	790366	MINNESOTA	2	4	8380	3.5	294							
		IOWA	29	84	10822	3.8	407	22	8	11827	428	2	11349	418
	791424	IOWA	8	19	12234	3.5	426	4	7	11229	434	2	11285	413
		KANSAS	14	26	11572	3.4	386							
	791980	IOWA	21	68	11878	3.7	435	15	17	13196	470	2	12552	456
	794731	ILLINOIS	1	1	13800	3.7	509							
		IOWA	13	32	11719	3.5	410	8	5	10523	387	1	9944	363
	800230	ILLINOIS	2	3	13695	3.7	509							
		MINNESOTA	2	2	6475	3.7	237							
		IOWA	109	346	11486	3.8	429	66	8	12181	443	2	12020	438
		KANSAS	1	1	10270	4.4	447							
	819064	IOWA	40	105	11997	3.4	412	26	7	12092	441	2	11600	418
		MISSOURI	1	3	13643	4.0	544							
	820131	ILLINOIS	2	3	14443	3.5	496							
		IOWA	25	50	11154	3.6	403	7	6	10943	391	2	10200	368
	825351	MINNESOTA	1	1	13180	3.5	467	1	20	12770	476	1	12600	473
		IOWA	51	110	11903	3.6	423	47	12	12106	434	2	11770	420
	829960	IOWA	3	4	10198	3.7	374	2	10	10515	372			
	840866	ILLINOIS	1	1	14330	3.5	496	1	9	13110	486	1	12099	441
		MINNESOTA	4	6	10366	3.7	388	3	15	11598	424	1	10846	397
		IOWA	325	694	11204	3.7	410	299	9	12101	434	2	11689	426
		NEBRASKA	1	5	11282	3.7	414	1	4	11463	422	3	10039	397
		TEXAS	1	3	10090	3.7	376	1	26	9283	366	2	9516	371
	845913	ILLINOIS	1	4	16490	3.1	498	1	10	12748	430	2	12268	420
		IOWA	117	314	12960	3.5	446	90	8	12095	435	2	11867	429

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE MISSOURI	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERO		
								NO. RECORDS	MILK LB.	FAT LB.	AV. RECORDS	NO.	MILK LB.	FAT LB.
			1	7	11876	4.1	485	1	10	9987	386	3	11899	466
	862295	IOWA	1	1	9700	3.3	320	1	15	11290	395			
	867431	IOWA	9	19	10122	3.5	361							
	872775	IOWA	25	78	12086	3.5	428	18	7	11356	425	2	11179	413
	884209	IOWA	8	33	12524	3.6	453	1	7	12577	449	3	10326	376
	884544	IOWA	3	9	10606	3.5	378	2	2	13545	454	1	11630	399
	886174	IOWA	47	122	12667	3.6	451	46	10	12656	460	2	12075	445
	889698	IOWA SOUTH DAKOTA	60 1	144 1	11487 12640	3.8 3.9	432 492	57	10	12133	437	2	11692	432
	893543	IOWA	11	32	11988	3.4	407	2	5	11376	386	2	11900	413
	905927	IOWA	7	12	14116	3.7	516	7	6	12536	449	2	12458	458
	906807	IOWA	4	6	12220	3.4	416	1	7	11180	409	2	10383	394
	938595	WISCONSIN IOWA MISSOURI KANSAS OKLAHOMA	1 325 1 1 1	2 565 1 3 1	11705 13294 12550 15813 16330	3.5 3.5 3.1 3.6 3.1	404 463 392 568 507	1 311 1 1 1	7 11 2 3 3	12905 12740 12510 14430	513 465 417 533	2 1 1 1 1	12173 11129 11140	450 419 432
	949037	IOWA	49	103	12532	3.7	456	47	10	12529	458	2	12360	455
	954213	IOWA	31	72	11601	3.6	410	14	10	13250	479	2	13133	469
	963902	IOWA	4	23	12178	3.5	416							
	967331	ILLINOIS IOWA NEBRASKA	1 69 1	2 144 1	11130 12632 13700	3.5 3.6 3.9	390 451 539	1 65 1	28 12	13135 12479	482 457	1 2	14170 12247	510 449
	973824	ILLINOIS WISCONSIN MINNESOTA IOWA MISSOURI OKLAHOMA	1 1 1 213 1 2	1 2 2 315 2 2	18210 12245 13010 12619 14960 12080	4.1 3.7 3.7 3.8 3.9 3.8	745 450 482 473 585 451	1 1 1 202 1 2	3 10 24 12 32 18	14110 12790 13305 12940 10145 8390	556 497 482 472 389 357	1 1 2 1 1 1	12034 12622 11810 12293 8639	464 500 437 463 359
	974970	IOWA	7	13	9859	3.7	356	7	5	11571	418	3	9227	348
	987497	MINNESOTA IOWA OKLAHOMA	1 177 2	1 250 4	13350 12918 10302	3.7 3.6 3.4	496 463 355	1 166 2	27 19 9	13550 12824 9955	481 468 376	1 1 2	12502 12278 10004	459 466 358
	994415	IOWA	6	7	12019	3.5	413	5	9	12653	450	1	12194	441
	995123	MINNESOTA IOWA CALIFORNIA	3 258 1	4 476 1	12560 12535 21510	3.8 3.8 4.1	474 470 888	3 241 1	22 11 40	12545 12809 16610	450 465 580	1 2	11628 12335	425 457
	1001812	IOWA	1	1	8680	3.3	285	1	3	12650	493	1	11129	402
	1005253	IOWA CALIFORNIA	2 1	2 1	10920 18310	3.6 3.5	393 643	2 1	6 58	12055 16830	485 593	1	11598	461
	1019538	ILLINOIS WISCONSIN MINNESOTA IOWA MISSOURI SOUTH DAKOTA KANSAS OKLAHOMA TEXAS ARIZONA	2 4 4 242 1 2 2 1 1 2	3 7 7 366 1 3 2 1 1 2	13888 13338 12888 13795 13640 10340 12265 9970 12460 12925	3.5 4.4 3.6 3.9 3.6 3.8 4.6 3.4 4.0 3.8	482 576 461 531 493 391 533 335 496 488	2 4 1 236 1 1 1 1 1 2	14 7 19 12 9 3 7 13 182	12130 12676 12407 13205 11900 13490 10600 13440 12200	419 483 455 480 438 563 427 514 429	2 1 3 1 1 1 1 1 1	11492 14203 11398 12595 9309 8012 12590 13887	414 541 418 473 347 273 473 495
	1032776	IOWA	2	2	10380	3.5	367	2	14	9995	351	1	11064	396
	1035691	IOWA	3	4	11732	4.0	475	3	6	14240	529	1	12793	488
	1037622	IOWA	15	26	12626	3.6	452	15	16	13076	482	2	12178	451
	1041824	IOWA	8	19	12587	3.6	447	8	9	12365	441	2	11759	450
	1043101	MINNESOTA IOWA	2 65	3 141	16990 12209	3.6 3.7	607 443	2 59	20 12	13665 12400	487 453	2 2	12819 12213	466 443

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
	1051867	WISCONSIN	1	1	10710	3.3	350	1	29	10820	394	1	11183	425
		IOWA	34	45	13505	3.6	488	26	15	13035	482	1	12350	466
		LOUISIANA	1	1	15720	4.6	731							
		OKLAHOMA	1	2	15915	4.4	701	1	23	9335	431	2	9265	445
	1057124	ILLINOIS	1	2	10700	3.2	347	1	19	14480	477	1	14170	510
		MINNESOTA	2	2	14000	3.4	482	2	8	12620	453	1	13653	490
		IOWA	41	58	13336	3.6	472	34	23	12997	476	1	12814	489
	1058092	IOWA	4	4	10855	3.8	411	3	13	12947	477	1	11933	451
	1059273	WISCONSIN	1	2	12065	3.8	452	1	19	10430	390	2	11026	417
		IOWA	49	104	12317	3.7	452	46	9	12399	447	2	11545	428
	1059274	ILLINOIS	4	6	12578	3.8	469	4	13	12803	462	1	12193	459
		MINNESOTA	2	4	10500	3.7	370	2	22	12479	452	2	11710	425
		IOWA	200	322	12349	3.7	455	191	13	12872	474	2	12187	464
		ALABAMA	1	1	12510	3.5	488	1	98	10680	394	1	10181	384
		OKLAHOMA	1	1	13000	4.0	515	1	7	9950	364			
		TEXAS	1	2	9815	3.9	374	1	28	13625	512	1	12590	473
		CALIFORNIA	5	10	14737	3.6	526	5	46	16270	581			
	1060752	WISCONSIN	1	2	18940	3.8	721	1	15	13190	488	1	14203	541
		IOWA	43	62	13286	3.6	479	38	17	12996	480	1	12176	464
		GEORGIA	1	1	9830	3.5	342	1	1	12800	413			
	1066941	WISCONSIN	1	2	14020	3.3	457	1	10	12605	496	1	12622	500
		MINNESOTA	1	2	13370	3.5	469	1	27	14380	518	2	13653	490
		IOWA	39	51	11834	3.6	425	34	19	13024	481	1	12270	462
	1068240	IOWA	27	33	13152	3.7	491	27	18	13161	479	1	12851	478
		NEBRASKA	1	2	13310	3.5	457	1	14	10850	381	2	10181	370
		KENTUCKY	1	1	7600	3.6	276	1	11	8890	332	1	9636	338
	1073461	WISCONSIN	2	3	12453	3.8	468	2	14	13933	534	1	12622	500
		MINNESOTA	1	2	13590	3.4	454	1	24	13280	483	2	11810	437
		IOWA	139	204	13550	3.7	502	132	16	13073	478	1	12203	471
		OKLAHOMA	3	5	15652	3.6	559	3	20	9968	424	2	9094	385
		ARIZONA	1	1	11110	3.4	374	1	100	12100	431	1	13527	482
	1090982	IOWA	5	7	13095	4.0	510	4	20	13885	500	1	11853	465
	1113263	IOWA	23	31	13294	3.6	476	23	14	13141	477	1	12608	481
		OKLAHOMA	1	1	13230	3.6	478	1	20	9140	426	1	9265	445
	1113528	IOWA	11	12	12615	3.5	439	10	15	13399	487	1	12513	486
		TEXAS	1	1	14730	3.7	544							
	1120013	WISCONSIN	1	1	9930	3.6	360	1	12	12340	461	1	12502	460
		MINNESOTA	4	5	12830	3.5	442	4	18	13148	480	1	13273	488
		IOWA	1	1	17360	3.5	608	1	18	13660	519	1	15184	556
		NEW MEXICO	1	1	12680	4.0	504	1	8	13670	501			
	1174840	IOWA	8	8	10810	3.7	388	8	14	11825	439	1	12975	482
	1192826	IOWA	25	29	12560	3.6	451	23	16	13167	477	1	12737	483
		NEBRASKA	1	1	16330	3.7	599	1	8	12530	452	1	12284	472
		OKLAHOMA	1	2	13750	4.2	576	1	30	8890	422	2	9025	436
	1206774	IOWA	7	8	11881	3.6	430	6	11	12022	438	1	13096	465
		OKLAHOMA	1	1	15170	3.6	549	1	20	9040	423	1	9265	445
	1216399	IOWA	21	26	12519	3.7	463	21	13	13310	480	1	13040	494
	1241692	MINNESOTA	1	1	6820	3.2	219	1	3	12650	430			
		IOWA	2	3	12375	3.2	399	2	28	13125	454	2	10950	496
	1246568	MINNESOTA	1	1	13270	3.3	440	1	3	10500	356			
		IOWA	8	8	13060	3.5	463	6	12	14570	527	1	14037	507
JER.	420915	IOWA	9	22	5346	5.4	288	1	5	6595	357	1	6649	351
	426851	WISCONSIN	1	4	6370	4.8	304	1	13	6730	338	1	7194	359
		IOWA	10	26	7254	5.4	387	3	3	7414	373	3	8201	387
	443126	PENNSYLVANIA	12	28	6986	5.7	398	5	16	7541	409	2	8005	438
	447609	IOWA	14	50	7249	5.2	372	3	7	7668	480	2	10149	534
	449432	ILLINOIS	2	4	7507	5.0	366	1	8	8405	450	2	7701	415
		IOWA	9	18	7471	5.1	366	6	7	7996	405	1	6667	361
		MISSOURI	30	63	7501	5.2	384	9	5	6096	375	2	6786	343
		OKLAHOMA	1	1	9560	4.7	453							

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO		
								NO. OAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	AV. FAT LB.
	449709	IOWA	4	4	6230	5.2	320							
		MISSOURI	1	2	9095	5.0	449	4	5	7870	370	1	7745	345
	450153	IOWA	11	21	5614	5.5	311	1	9	9067	468	1	10301	543
	454223	IOWA	5	18	6553	5.5	365	1	2	7698	439	1	6584	392
	457682	IOWA	2	3	6943	5.0	343	1	5	6100	307	2	7532	364
		MISSOURI	3	4	7182	5.6	392							
	466861	IOWA	10	12	7311	5.4	391	8	5	6938	359	1	6323	322
		MISSOURI	7	13	7901	5.6	440	3	9	8263	441	3	7996	418
	469885	IOWA	16	35	6449	5.4	345	9	7	6728	357	2	7072	355
	469887	IOWA	4	6	6709	5.3	343	3	6	8599	446	1	7908	408
	470314	IOWA	9	20	6577	5.0	324	2	4	6431	334	2	6560	342
	472179	MISSOURI	28	52	7123	5.5	387	11	7	8194	432	2	7912	414
		TEXAS	1	2	6000	5.6	338							
	472180	MINNESOTA	1	1	5640	6.1	342	1	7	6120	335	1	5712	296
		MISSOURI	19	37	7917	5.2	407	5	10	8114	428	2	8438	447
	475668	IOWA	16	29	5998	5.4	322	13	7	6934	365	2	7502	395
		MISSOURI	2	7	6355	5.4	345							
	477348	IOWA	1	3	8830	4.5	397	1	3	8363	444	3	9214	479
	487501	IOWA	8	10	8816	5.3	463	6	10	8774	441	1	7862	395
	499240	IOWA	8	20	5286	5.5	291	4	7	6155	326	2	6321	333
	504895	IOWA	6	13	7103	4.9	340	3	6	7986	354	2	7027	320
	509519	ILLINOIS	1	1	3920	5.6	218	1	7	7550	446	1	6682	389
		IOWA	5	7	7717	5.3	407	4	13	8798	473			
	515663	MINNESOTA	1	1	7380	6.1	448	1	50	9710	527	1	7837	424
		IOWA	7	15	6802	5.6	377	7	6	7126	379	1	7833	370
	519934	IOWA	1	1	6580	5.8	384	1	3	6300	339			
	521686	IOWA	5	8	8457	5.7	479	5	11	8254	431	1	7998	428
	521688	IOWA	3	4	8272	5.3	439	1	3	8580	431			
	533517	MINNESOTA	1	2	11465	5.0	575	1	85	9810	524			
		IOWA	1	1	9220	4.7	434	1	4	9720	542	1	8753	483
	538546	IOWA	5	5	10098	5.4	542	4	13	8073	434	1	8860	439
	548594	IOWA	3	6	6991	5.7	394	3	12	8480	447	1	6050	346
B. S.	33080	IOWA	11	26	12103	3.8	457	3	3	10389	419	3	10236	411
	39441	IOWA	22	71	9840	4.0	389	8	8	10271	421	2	9356	378
		SOUTH DAKOTA	1	3	11597	4.3	499							
	53873	IOWA	10	34	11022	4.0	440	4	6	11442	460	3	10043	403
	54160	ILLINOIS	1	1	6790	4.3	379	1	29	11230	457	1	10802	469
		IOWA	133	270	9966	4.1	411	101	10	10506	427	2	9732	405
		MISSOURI	1	1	10590	4.3	458							
		NEBRASKA	1	5	6622	4.5	296	1	4	8228	359	5	8310	345
		KANSAS	5	9	10370	4.0	414	1	13	9860	405	2	8756	362
		COLORADO	1	1	11130	4.1	459	1	7	9720	405			
	61381	INDIANA	1	2	7385	4.4	322							
		ILLINOIS	1	3	13920	4.2	590	1	2	13180	577	2	12394	499
		IOWA	26	56	11191	4.1	451	14	7	10035	414	1	9817	398
		WYOMING	1	3	6300	4.3	270	1	1	6950	271	1	6431	265
		COLORADO	1	1	11250	4.6	521	1	2	13120	521			
	62573	MASSACHUSETTS	4	12	11372	4.3	490	1	10	14190	617	2	11524	517
		CONNECTICUT	1	1	14340	3.7	532							
		NEW YORK	12	28	10815	4.1	441	1	3	7625	303	2	13587	557
		PENNSYLVANIA	1	3	11603	4.3	305							
		OHIO	1	2	11475	3.9	448	1	5	12315	476	1	10889	433
		WISCONSIN	1	2	9740	3.7	365	1	6	10905	439	1	10104	397
		IOWA	5	16	10393	3.9	404	4	12	10346	408	2	9905	391
	64188	IOWA	1	3	8653	4.4	379	1	14	8100	322	2	7881	323

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	AV. FAT LB.
	64879	ILLINOIS	3	4	12018	4.1	487	3	19	11748	487	1	11583	480
		IOWA	86	196	10434	4.0	414	69	10	10568	423	2	9925	408
		COLORADO	1	1	11430	4.0	459	1	2	9440	375	1	9886	415
		OREGON	1	1	15170	4.5	680					1	6126	295
	67060	IOWA	3	9	9353	4.4	404	1	5	10580	459			
	70627	ILLINOIS	1	3	10973	4.3	473	1	22	12150	495	1	10944	455
		IOWA	79	144	11051	4.2	462	65	12	10907	444	1	10082	427
		MISSOURI	1	3	11413	4.0	462							
		NEBRASKA	2	2	10600	4.3	460	2	8	11715	492	1	9189	393
		VIRGINIA	1	2	9820	4.2	408							
		OKLAHOMA	1	1	9740	4.4	426	1	2	9600	382			
	71005	IOWA	3	7	10658	3.8	403	2	4	11600	420			
	71475	IOWA	12	30	8957	4.4	391	4	8	9792	404	2	9755	395
	73128	WISCONSIN	1	1	3330	4.6	152							
		IOWA	19	52	9398	4.1	387	8	7	10676	429	2	9714	391
		UTAH	2	5	10647	4.3	461	2	4	11546	458	2	9919	400
	75432	ILLINOIS	1	1	11090	4.2	469							
		WISCONSIN	1	2	11435	3.8	428	1	17	13010	515	1	11881	459
		MINNESOTA	1	2	13830	4.1	559	1	21	14030	555	2	14056	540
		IOWA	71	121	11645	4.1	473	56	13	10979	447	2	10114	443
		VIRGINIA	1	1	13910	4.2	584	1	2	8580	396	1	11412	487
		OKLAHOMA	1	3	11163	4.1	459							
		COLORADO	1	1	12750	4.1	524	1	3	10790	424			
	82516	MASSACHUSETTS	1	2	12000	4.8	572							
		ILLINOIS	2	3	13105	4.3	550	1	20	11995	502	2	11522	476
		WISCONSIN	2	3	10923	4.3	467	2	13	12455	518	2	12303	524
		MINNESOTA	1	3	9477	3.9	371							
		IOWA	65	140	11400	4.1	463	56	14	10857	436	2	10121	430
		MISSOURI	1	1	11190	4.0	443							
		NEBRASKA	1	2	8135	4.0	326	1	4	9915	443	2	8661	365
		KANSAS	1	3	9713	4.8	463							
		IDAHO	2	5	11458	4.6	528	2	8	9343	398	1	10355	459
		ARIZONA	1	1	14290	3.9	562							
	84812	ILLINOIS	1	1	8750	5.1	444	1	32	12040	487	1	10802	469
		WISCONSIN	2	2	16695	3.7	613	2	5	10500	437	1	12938	510
		IOWA	41	70	10237	4.1	421	30	8	11162	452	1	10885	443
		NEBRASKA	1	1	9460	3.3	314							
	88895	IOWA	26	51	12052	3.8	457	21	18	10608	429	1	10083	425
	90848	MASSACHUSETTS	1	1	6380	3.9	250	1	5	7100	260	1	10355	427
		ILLINOIS	2	4	13945	4.3	589	2	34	12040	495	1	10944	455
		MINNESOTA	1	2	6230	4.2	259	1	6	9510	412	2	5723	435
		IOWA	62	112	10493	4.3	451	49	14	10833	441	1	10056	430
		OREGON	1	1	9730	3.9	383	1	1	13890	549	1	8448	361
	94307	IOWA	17	35	11880	4.0	479	14	10	11082	447	2	10921	442
	95707	IOWA	6	6	10977	3.9	429	4	25	10440	425	1	11140	438
	99308	IOWA	6	8	9782	4.2	411	4	13	9283	394	1	9603	435
		SOUTH DAKOTA	2	2	10235	4.5	452	2	13	11620	495	1	10960	449
	108542	MINNESOTA	6	10	11775	4.3	499							
	108913	IOWA	7	9	10198	4.0	410	5	14	10503	421	1	10044	437
	109596	WISCONSIN	2	4	12385	4.4	539	1	8	10923	454	2	10186	422
	113551	MINNESOTA	1	1	13800	4.5	619	1	6	12570	541			
		IOWA	49	69	9156	4.2	388	43	13	10417	415	1	9897	418
M. SH	11585	IOWA	8	12	8548	3.7	513	7	5	8347	318	1	8753	330
	16969	IOWA	13	19	7832	3.9	304	9	4	7416	285	2	7347	285
	17791	IOWA	5	9	8034	4.2	338	3	14	7657	289	2	7614	291
	30545	IOWA	2	2	8325	3.6	301	2	8	7925	297	1	7368	271
	87134	IOWA	4	4	7440	3.8	283	4	7	8025	312	1	7863	304
	94856	IOWA	1	1	10070	4.2	422	1	5	8520	330	1	8971	339
	2023142	IOWA	3	6	5602	4.0	224	1	5	7700	303	1	5603	221

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY NO.	RECORDS NO.	MILK LB.	AV. FAT LB.	YEARLY HERO RECORDS NO.	MILK LB.	AV. FAT LB.
003	AYR.	2031115	IOWA	1	1	5340	3.5	186							
		2178358	IOWA	11	30	8586	3.6	309	5	2	8488	337	2	7385	288
		2286255	IOWA	2	4	7802	3.8	296							
		2368331	IOWA	8	13	6607	3.9	255	6	8	8516	323	2	7863	310
		2496158	IOWA	2	3	7958	4.4	349	2	6	7278	273	2	6955	264
		73814	IOWA KANSAS	7 3	13 11	9521 10364	4.1 4.2	387 437	7	5	10639	413	1	10472	409
		83087	IOWA	6	17	9183	4.0	366	4	19	10108	406	3	8396	400
		94122	IOWA	11	17	9642	4.1	390	9	11	10049	411	2	9517	381
		101756	IOWA	1	3	8493	4.2	358							
		248741	IOWA	6	7	7304	4.7	339	2	5	7688	381	1	7243	354
GUER		270666	IOWA	4	11	9131	4.7	430	1	7	9270	487			
		282782	IOWA	23	54	7511	4.7	348	19	7	8625	395	1	8487	398
		306546	IOWA	6	18	7642	4.9	379	5	6	7897	375	2	9188	432
		308632	MINNESOTA IOWA	7 40	10 86	7851 8061	5.1 5.0	397 403	29	7	9335	416	2	9141	412
		322028	IOWA	10	11	7088	4.8	344	5	5	10110	424	1	10181	425
		328945	IOWA	1	1	8480	4.7	395	1	18	8020	361	1	8611	405
		344279	IOWA	5	6	8239	4.6	374	3	6	8157	383	1	8382	389
		351723	IOWA	1	1	6120	5.0	308							
		369069	IOWA	17	38	9872	4.6	448	16	7	9426	453	2	9027	430
		385173	IOWA	9	20	7193	4.9	349	7	8	9951	430	2	8865	404
		386820	IOWA	4	4	7748	4.7	360	4	11	8130	401	1	8822	411
		387615	IOWA	1	5	6814	4.8	325	1	2	7020	365	3	7946	376
		389260	IOWA	5	8	8219	5.0	406	5	6	9885	461	2	9734	423
		392743	IOWA IOAHO	20 1	32 2	7484 7300	4.9 5.3	363 379	18 1	8 6	9067 8695	409 406	1 2	8952 9222	404 430
		401883	IOWA	16	37	8434	4.6	387	13	12	9003	405	2	8309	391
		417464	IOWA	2	3	9248	4.8	438	2	6	10070	456	2	8066	403
		431889	IOWA	1	2	9080	4.6	414	1	18	9105	404	2	8949	399
		462487	IOWA	6	7	7376	4.8	352	6	11	8343	383	1	8756	383
	HOL.	761974	PENNSYLVANIA WISCONSIN IOWA MISSOURI NEBRASKA	1 2 79 1 1	1 2 205 1 6	13300 11390 12461 7990 12790	3.9 3.9 3.6 4.0 3.8	517 434 451 321 490							
		766944	IOWA	26	60	11237	3.6	399	22	8	11620	409	2	11493	407
		795259	IOWA NEBRASKA	6 1	19 1	12049 10770	3.7 3.4	438 361	2	7	15270	533	5	14874	526
		800014	WISCONSIN IOWA	1 9	1 31	10050 12395	3.2 3.6	322 444	1 6	10 5	10920 12174	375 446	1 1	11903 11249	409 410
		810740	IOWA	4	10	11777	3.6	416	1	4	11100	404	1	10704	382
		827425	IOWA MISSOURI NEBRASKA	49 1 1	124 3 2	11829 10883 12870	3.5 3.4 3.6	415 373 462	30 1	9 9	11645 12795	424 460	2 2	11521 10655	421 396
		832079	MINNESOTA IOWA	1 5	1 16	10240 11889	3.8 3.7	393 434	1 5	10 5	12230 11813	441 431	2	11340	401
		835595	IOWA	14	33	11791	3.6	426	11	9	12257	434	2	10963	397

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO		AV. FAT LB.
								NO. O AUS.	RECOROS NO.	MILK LB.	FAT LB.	RECOROS NO.	MILK LB.	
IOWA	838732	WISCONSIN IOWA	1 14	3 35	13020 13390	3.6 3.4	471 449	1 4	8 6	14300 12146	510 428	2 2	13304 12650	489 428
	838881	WISCONSIN IOWA	2 43	6 78	8973 11404	3.7 3.6	331 407	2 34	21 7	9727 11704	352 426	2 2	10375 11512	382 416
	847222	IOWA	17	44	13478	3.5	478	8	10	11889	432	2	12772	468
	869066	IOWA	16	41	11676	3.7	431	13	5	12783	454	2	12128	439
	875500	IOWA	1	1	11480	3.4	391	1	10	11940	446	1	11619	422
	906439	IOWA IDAHO	12 4	20 9	11330 13852	3.5 3.3	396 450	11 3	10 9	11974 11782	433 412	2 3	11016 12061	409 424
	908807	WISCONSIN IOWA	2 133	2 255	15195 12279	3.4 3.4	521 419	1 125	21 10	16510 12172	611 435	1 2	14116 11920	530 430
	910333	WISCONSIN IOWA	2 40	3 76	11883 12697	3.3 3.5	384 439	2 36	13 9	10770 12080	408 430	2 2	11914 12371	446 441
	915690	IOWA	3	7	12140	3.6	442	2	7	12715	431	1	14682	469
	923975	IOWA	3	8	12434	3.3	414	1	7	12190	473	1	12088	481
	952576	IOWA	30	70	12831	3.5	452	27	7	12310	437	2	12159	436
	959158	IOWA	6	11	11543	3.5	406	6	9	12087	427	1	10710	378
	974041	IOWA	19	51	11757	3.6	418	17	7	12234	429	2	11808	434
	993889	IOWA	12	16	13140	3.6	475	10	9	12669	479	1	11789	465
	998848	IOWA	89	148	13121	3.5	454	81	10	12568	457	2	11890	435
	1002143	IOWA	1	3	10813	3.8	412	1	6	10630	390	3	10348	372
	1059628	IOWA	85	141	12369	3.5	437	82	10	12507	449	2	11885	439
	1085240	IOWA	13	31	12604	3.6	457	12	8	12756	461	3	11733	435
JER.	405995	IOWA	4	7	6786	5.4	362							
	412443	IOWA	5	17	7693	5.6	426	4	3	8724	453	2	9908	355
	461003	IOWA	1	1	8110	5.6	457					1	7249	386
	461523	IOWA	10	10	7876	5.3	415	6	5	8650	441	1	7852	409
	468908	IOWA MISSOURI	4 2	4 7	7585 9581	5.3 5.4	399 514	2	6	8995	458			
	470982	IOWA	13	20	8292	5.3	437	10	4	8660	433	2	8568	470
	474789	IOWA	1	1	9610	4.8	465	1	8	8690	450			
	474789	IOWA	1	1	9610	4.8	465	1	8	8690	450			
B. S.	38932	IOWA	2	6	10568	4.3	449	1	6	12695	544	2	8562	344
	42266	IOWA	11	20	9072	4.2	385	9	5	9416	398	2	9254	392
	48160	WISCONSIN IOWA	1 7	4 12	9205 10097	3.6 3.9	329 390	5	6	9704	388	2	8947	362
	50482	ILLINOIS WISCONSIN IOWA	1 1 4	2 1 6	11005 12950 11474	4.2 4.4 4.2	460 573 481	1 2	4 4	13710 13229	550 477	2 3	11919 9018	463 412
	50599	IOWA	4	7	10951	4.1	438	1	5	7857	329	1	7368	291
	52728	IOWA	26	43	10410	4.4	455	25	15	10459	434	1	9623	424
	52926	IOWA	2	11	9960	4.0	393	2	5	9755	384	2	9830	396
	55470	IOWA	8	13	10586	4.0	425	8	8	10617	441	2	9418	422
	56869	IOWA COLORADO	2 1	4 1	12175 8590	3.8 3.6	460 312							
	58032	IOWA	30	46	8348	4.4	362	16	6	10010	411	1	9813	411
	58254	IOWA NEBRASKA	9 1	17 2	11479 9030	4.1 4.1	467 370	8 1	8 4	10484 11030	418 457	2 1	10708 10104	436 414
	63725	IOWA	1	2	12610	4.0	496	1	6	10700	449	2	10061	420

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OBUS.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	YEARLY RECORDS NO.	MILK LB.	FAT LB.
		64656	IOWA	21	39	10241	4.3	428	18	5	10114	422	2	9670	402
			MISSOURI	1	5	8464	4.3	361	1	10	8084	331	3	8295	339
			NEBRASKA	2	10	13649	4.2	571	1	9	10752	426	3	11067	445
			UTAH	1	2	9420	3.6	341	1	3	14020	538			
		72126	IOWA	10	17	10214	4.4	441	8	5	10795	443	1	9782	409
	M. SH	23073	INDIANA	1	1	11510	3.6	412							
			IOWA	8	11	8772	3.9	337	6	4	8661	342	1	6447	250
		51888	IOWA	3	3	7300	3.4	250	3	6	10223	370	1	8506	312
		71897	IOWA	1	3	6340	3.7	234	1	3	9827	375	1	6813	255
		85509	INDIANA	1	1	7740	3.6	275	1	10	8110	308	1	5853	207
		119789	IOWA	4	4	6733	3.8	248	3	3	9653	357			
		136443	MINNESOTA	2	2	10835	3.7	401	2	28	10255	387	1	7848	305
		1943617	ILLINOIS	1	1	6620	4.0	264							
			IOWA	3	5	7492	3.8	297	1	4	13220	536			
		2079274	ILLINOIS	1	2	6370	4.1	265	1	10	7040	275	2	5995	233
			IOWA	2	7	9299	3.8	351	1	2	10187	388	2	8519	324
		2118785	MINNESOTA	1	2	9660	4.1	396	1	9	8655	337	2	7875	311
			IOWA	7	14	8333	3.9	321	5	3	8121	315	2	6228	242
			KANSAS	1	2	6010	3.8	223							
		2283876	IOWA	1	2	9500	3.9	366	1	4	8250	314	1	6813	255
004	GUER	290595	IOWA	1	1	12240	4.0	493	1	8	7420	352			
	HOL.	801502	IOWA	5	16	12533	3.5	437	1	4	16837	580	1	17102	590
		828503	IOWA	3	9	12251	3.5	421							
005	GUER	318118	IOWA	7	17	6099	5.3	318							
	HOL.	716526	IOWA	1	4	11410	3.4	386							
		750903	IOWA	3	12	10699	3.7	400	1	3	13370	471	2	12388	443
	JER.	411482	IOWA	8	30	6733	5.1	341							
		443668	IOWA	53	191	6445	5.7	363	2	3	8587	438	1	10301	543
	B.S.	52866	IOWA	1	6	12605	4.0	491							
			SOUTH DAKOTA	1	1	11230	3.7	415							
006	GUER	223681	IOWA	1	2	7270	5.1	364							
		263030	IOWA	1	7	8447	4.9	410	1	8	7670	364	2	7538	366
		330118	IOWA	3	13	7686	4.6	349	1	2	7760	366	1	7379	342
	HOL.	743685	WISCONSIN	1	1	15850	3.4	539							
			IOWA	39	88	13667	3.5	470	2	4	13444	493			
			NEBRASKA	2	3	13238	3.8	500							
		761870	IOWA	8	17	12258	3.6	440							
		784746	MINNESOTA	1	1	9140	3.2	296							
			IOWA	12	29	12251	3.4	419	5	4	12467	448	2	11249	415
007	HOL.	889438	IOWA	3	15	12965	3.4	444	3	5	12540	441	2	11757	423
			MISSOURI	1	1	15240	3.1	472							
		943229	IOWA	1	4	13093	3.3	437	1	5	12020	404	3	12528	423
		955798	IOWA	5	14	12006	3.6	430	4	5	12769	452	2	13010	452
		1148501	IOWA	3	5	15055	3.6	531	3	15	13928	490	1	13509	479
	B.S.	55967	IOWA	1	4	10578	3.7	392	1	4	10810	443	2	10464	427
		71090	IOWA	6	15	9731	4.1	387	4	7	10101	404	2	9516	390
			NEBRASKA	1	4	10115	3.6	361	1	9	11040	451	3	11067	445
008	AYR.	92297	IOWA	5	5	8172	4.4	357	5	13	10168	429	1	8044	343
		96468	IOWA	3	3	10555	4.0	417	3	11	9780	380	1	9763	391
			NEBRASKA	1	1	8990	4.5	404	1	5	9470	394	1	6976	303

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV. NO.	RECORDS NO.	MILK LB.	FAT LB.	YEARLY HERD NO.	MILK LB.	FAT LB.
								NO.	NO.	NO.							
GUER	102814	IOWA	1	1	10040	3.9	393	1	2	10490	385						
	386924	IOWA	10	12	7184	4.8	344	9	11	8504	403	1	8580	392			
		IDAHO	1	2	6975	5.2	357										
	424899	IDAHO	1	1	13660	5.2	711										
	447107	IOWA	14	17	7069	4.8	335	14	9	9274	405	1	8557	391			
		MONTANA	1	2	8650	5.3	456	1	28	9320	476						
		IDAHO	11	24	7963	4.8	382	11	9	8930	429	2	8437	402			
	465332	IDAHO	10	26	9580	5.2	493	10	10	8937	427	2	8704	420			
		OREGON	1	5	11866	4.0	479	1	16	8910	400	5	9197	421			
	467131	IOWA	6	9	7689	5.0	380	6	11	8210	384	2	8379	399			
HOL.	470189	IOWA	3	3	7220	4.4	320	3	11	9597	460	1	8273	405			
	491144	IOWA	8	14	6660	4.4	293										
	911020	IOWA	14	25	12502	3.5	438	11	72	12934	477	2	7832	442			
	920561	IOWA	213	339	12773	3.6	461	195	14	12821	460	2	11826	444			
		MISSOURI	1	1	12900	3.7	474										
		NEBRASKA	1	3	11247	3.8	429	1	26	12733	478	3	11641	432			
	923974	IOWA	6	14	10747	3.6	385	3	7	11762	420	4	11647	400			
	939074	PENNSYLVANIA	1	1	12800	3.6	455	1	9	15330	561	1	12906	473			
		IOWA	180	319	12291	3.5	430	173	10	12241	444	2	11901	436			
		SOUTH DAKOTA	1	2	12630	4.4	560	1	5	16445	647	2	15021	592			
		NEBRASKA	1	2	11175	3.9	435	1	31	13870	516	1	11903	443			
	949284	IOWA	165	247	12399	3.7	461	159	11	12719	457	1	11929	441			
	1009128	IOWA	40	55	13185	3.8	499	20	16	12502	464	1	11281	446			
	1035305	IOWA	70	122	12933	3.7	472	66	13	12379	447	2	12023	441			
		KANSAS	1	1	18250	3.4	623										
	1057691	IOWA	32	42	12102	3.6	433	32	13	12895	463	1	12601	452			
	1083519	IOWA	5	8	13575	3.6	480	4	23	13088	462	2	11042	470			
	1105369	WISCONSIN	1	1	12920	3.3	424	1	21	14790	510						
		IOWA	46	81	10471	3.8	399	46	15	11861	428	2	11060	418			
	1107500	IOWA	44	53	12779	3.8	486	41	16	12694	465	1	12114	462			
		MISSOURI	1	1	6770	4.3	294										
	1141527	ILLINOIS	1	1	15210	3.0	458	1	5	16610	455						
		IOWA	36	41	13333	3.4	454	33	18	12619	454	1	12055	450			
		IDAHO	8	12	15543	3.5	533										
	1148601	IOWA	89	129	13650	3.5	475	81	10	13619	484	1	13106	476			
	1152126	IOWA	10	10	13164	3.7	483	10	16	13310	491	1	12787	473			
		MISSOURI	1	1	13340	4.6	616										
	1182598	ILLINOIS	1	1	15050	3.0	459	1	5	14040	454						
		IOWA	2	2	12750	3.6	462	1	28	13320	496	1	13930	518			
	1189590	ILLINOIS	1	1	15290	3.4	520	1	5	14000	442						
		IOWA	48	73	12549	3.7	460	42	31	12164	437	2	10962	461			
	1212420	IOWA	40	59	13725	3.6	490	38	32	12122	435	2	8741	413			
	1218949	IOWA	1	1	15060	3.5	452	1	2	9920	353	1	14573	532			
	1221775	IOWA	18	30	11570	3.7	427	17	45	11675	430	2	8725	444			
	1222973	IOWA	16	19	13832	3.5	479	14	9	14466	518	1	13882	500			
		NORTH DAKOTA	1	1	12470	4.0	494										
	1231506	ILLINOIS	1	1	14500	3.3	477	1	5	14150	451						
		IOWA	3	3	12233	3.8	469	3	11	12610	448	1	12346	426			
	1236493	IOWA	1	1	15740	3.7	506	1	21	13370	492	1	14530	528			
	1242194	IOWA	1	1	10890	4.0	434										
JER.	541510	IOWA	1	3	7820	5.6	434	1	20	7030	399	1	7456	420			
	542373	IOWA	4	5	7960	5.2	411	4	9	7705	413	1	8164	448			

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
									NO. DAUS.	RECORDS NO.	MILK LB.	AV. FAT LB.	RECORDS NO.	MILK LB.	AV. FAT LB.
B. S.	65735	IOWA	11	14	12264	3.8	466	11	8	10439	423	1	10282	418	
	92957	IOWA	4	5	9433	4.4	407	4	6	10603	433	1	11385	471	
	97881	IOWA	12	21	9558	4.6	432	11	9	10596	423	1	9740	397	
		MISSOURI	1	1	7960	4.5	361	1	15	7620	304	1	8513	348	
		KANSAS	1	2	10660	4.1	440								
		COLORADO	1	1	13520	4.2	571	1	4	10380	438	1	9821	429	
	99251	IOWA	18	30	10635	4.1	435	14	9	9810	400	2	9313	387	
	103920	WISCONSIN	1	1	12140	4.0	487	1	6	12290	487	1	12938	510	
		IOWA	8	12	9618	4.1	390	7	7	9334	372	1	9928	401	
	108074	IOWA	5	5	11096	4.0	443	4	10	12800	510	1	9690	380	
	114989	IOWA	1	1	7150	4.4	317	1	10	10130	419	1	9952	423	
	116807	IOWA	4	4	8888	4.5	398	3	6	9250	379	1	9058	383	
	117775	IOWA	8	9	8201	4.3	359	8	6	8878	380	1	7853	323	
	118142	IOWA	1	2	12570	4.7	581								
M. SH	28346	IOWA	3	7	7809	3.9	306	3	4	7348	278	2	6822	266	
	44950	IOWA	6	9	7136	3.6	251	6	4	12042	456	1	8421	320	
	55946	IOWA	7	8	8569	4.0	338	6	5	8885	323	1	7616	283	
	85254	IOWA	1	1	7740	4.0	310	1	14	8010	296	1	7815	293	
009	GUER	359347	IOWA	5	11	6514	5.6	363	1	6	7220	319			
	HOL.	796333	MINNESOTA	1	6	11502	3.3	364	1	3	10130	376	2	9450	333
		IOWA	23	41	12769	3.5	443	19	10	13047	452	2	13235	473	
		887664	IOWA	5	14	10946	3.9	424	2	5	13873	521	3	14738	538
B. S.	58096	ILLINOIS	1	2	9785	4.2	413								
		WISCONSIN	1	3	6490	3.7	245	1	9	8573	350	1	7641	317	
		IOWA	2	9	8801	4.2	371	1	3	10906	452	4	10497	436	
		OREGON	1	2	12455	4.0	492								
010	HOL.	874707	IOWA	4	9	12672	3.5	443	4	5	12946	468	3	12611	428

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV. FAT LB.	YEARLY HERO			AV. FAT LB.
								NO. DAUS.	RECORDS NO.	MILK LB.		RECORDS NO.	MILK LB.	FAT LB.	
001 GUER	302675	ILLINOIS MISSOURI	2 10	2 24	8465 7301	4.6 4.9	395 355	1 6	12 6	10760 9382	540 441	1 3	8404 8547	414 410	
	341264	MISSOURI	5	10	7683	5.0	387	2	8	9036	396	2	8061	392	
	373903	MISSOURI	5	16	8243	4.6	377	3	8	8502	399	3	7764	372	
	399789	MISSOURI	6	12	6801	4.9	333	1	6	8685	407	3	7976	360	
	403543	MISSOURI KANSAS	17 2	46 2	7680 5960	5.0 4.7	379 276	13	5	9077	399	2	8135	393	
	407773	MISSOURI	5	6	8673	5.0	435	1	11	13000	470	1	9096	402	
	416940	KANSAS	1	1	10350	4.4	450								
	428943	WISCONSIN MISSOURI NEBRASKA KANSAS	5 9 1 1	11 19 4 1	8103 10721 11740 3620	4.7 4.8 4.5 6.0	380 509 529 217	5 7	10 37	8388 9611	398 457	2 2	8343 8866	382 433	
	860106	MISSOURI	17	48	12151	3.6	438	6	8	11468	455	4	11809	471	
	874540	MISSOURI	54	116	11510	3.6	410	39	10	12447	454	2	12304	451	
	936924	MISSOURI	6	24	12964	3.6	463	6	11	12240	435	4	11993	433	
HOL.	959407	MISSOURI	43	77	10594	3.7	395	33	11	11912	432	2	11717	443	
	969932	MAINE MISSOURI KENTUCKY	1 65 1	1 154 2	14240 12652 12765	3.3 3.5 3.4	474 442 430	1 54 1	1 10 11	12430 12493 12100	451 464 439	2 1	12624 12633	461 468	
	1005798	MISSOURI	17	25	12092	3.8	459	14	13	12415	452	1	11636	421	
	1043859	ILLINOIS MISSOURI	1 10	2 19	12040 13270	3.9 3.7	465 489	1 10	3 11	14350 12090	502 443	2 2	12426 12386	433 455	
	1047120	MISSOURI	3	4	9707	3.9	371								
	1076680	MISSOURI VIRGINIA	8 1	8 2	11335 13775	3.6 3.9	410 541	8	14	11098	428	1	11158	428	
	1099321	MISSOURI	7	9	10864	3.4	367	5	5	11060	394	1	9110	341	
	1122869	ILLINOIS MISSOURI	1 19	1 41	4950 10978	3.4 3.7	168 404	1 15	2 10	9880 11646	333 428	1 2	9527 11305	326 421	
	1177943	MISSOURI	24	34	12150	3.7	450	24	11	13096	474	1	12181	463	
	1231857	MISSOURI	2	2	8610	3.8	320	2	12	10855	400	1	11096	419	
	1232456	MISSOURI	4	7	12268	3.5	432	4	11	11968	449	1	11965	459	
	1236350	MISSOURI	4	7	11414	3.9	436	4	14	11733	456	1	11256	449	
	1244854	ILLINOIS MISSOURI	3 2	4 2	15053 12205	3.6 3.7	546 433	3 2	10 9	14695 12750	552 480	1 1	13983 12895	530 486	
	1246337	MISSOURI	5	6	11331	3.6	407	4	12	12194	439	1	10584	406	
	1254088	MISSOURI	1	1	15240	3.3	499	1	9	14710	495	1	14323	491	
JER.	426784	INDIANA WISCONSIN MINNESOTA IOWA MISSOURI MARYLAND NORTH CAROLINA SOUTH CAROLINA GEORGIA FLORIDA	5 14 1 2 1 1 16 1 5 15	12 31 2 8 1 4 41 1 14 48	8087 7324 8275 5727 6430 9335 6744 7310 5988 7371	5.3 5.6 5.6 6.0 4.9 5.1 5.1 5.6 5.2 5.1	426 410 457 340 317 472 348 410 308 373	1 7 1 2	5 10 6 14	9620 7591 7630 8202	477 399 398 417	1 1 2 4	8960 7647 6807 7867	457 412 350 412	
	442230	MISSOURI	7	13	6344	5.2	332	4	9	6988	355	1	7513	385	
	444525	MISSOURI	13	38	7820	5.2	396	8	9	7860	396	2	7575	386	
	452873	MISSOURI	31	46	7639	5.2	393	5	8	7965	404	1	6993	360	
	457675	MISSOURI	16	41	7766	5.4	418	13	7	7383	378	2	7566	389	
	466979	IOWA MISSOURI	1 8	1 23	6730 7815	4.6 5.0	311 386	4 4	11 11	7618	400	3	7573	391	

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	AV. RECORDS NO.	YEARLY HERD NO.	MILK LB.	AV. FAT LB.
	478641	MISSOURI	1	1	9430	5.2	487								
	486514	MISSOURI	7	8	6784	5.3	360	6	7	8240	403	1	7779	388	
	498138	MISSOURI	8	15	7279	4.8	351	6	8	7542	374	2	7225	368	
	514625	MISSOURI	16	34	6924	5.6	384	3	6	7173	410	1	7790	439	
	538586	MISSOURI	1	2	9885	5.1	503	1	8	7520	412	1	8894	439	
8. S.	92669	MISSOURI	2	4	11103	3.8	422	2	8	10790	408	2	9693	385	
	119698	MISSOURI	4	5	9408	4.2	393	4	12	10733	427	1	9414	421	
	121266	MISSOURI	3	3	9987	4.2	422	1	10	9980	405	1	10224	403	
002 GUER	290211	MISSOURI	10	23	7906	4.9	386	8	8	9098	389	2	9100	397	
	306370	ARKANSAS	1	2	7290	4.4	323								
	310677	MISSOURI	5	15	9852	4.4	433	1	4	10061	464	4	10835	514	
	319076	MISSOURI	4	5	6424	5.1	332	2	1	9880	426	2	9543	443	
	319761	MISSOURI ARKANSAS	17 1	34 1	8379 10020	5.0 4.3	414 428	14	8	9547	460	2	9177	444	
	330925	MISSOURI	50	114	7905	5.0	394	38	7	8786	401	2	8712	406	
	340028	MISSOURI ARKANSAS	14 1	40 1	8799 7880	4.6 5.4	402 422	7	6	8867	427	3	7849	383	
	342043	MISSOURI TEXAS	14 1	26 2	7585 6375	5.3 5.2	399 330	13 1	11 41	9179 8480	455 388	1 1	8967 8262	423 380	
	377904	MISSOURI	6	13	7457	4.7	351	2	6	8277	382	3	7941	365	
	380562	MISSOURI ARKANSAS	2 1	3 1	8015 8020	5.0 4.4	398 353	1	8	8380	400	1	7085	352	
	381264	MISSOURI	2	9	7948	4.3	341	2	7	7740	369	4	7867	375	
	381864	MISSOURI	4	5	6146	5.2	318								
	381865	MISSOURI	54	124	7787	5.0	389	28	5	9179	424	2	8886	420	
	382854	OHIO MISSOURI	1 32	1 105	6520 7836	4.5 5.1	296 396	1 20	1 5	8530 8633	392 415	3	8665	415	
	384112	MISSOURI	39	94	7363	4.9	361	18	9	9001	426	3	8676	410	
	404877	MISSOURI NEBRASKA	22 1	50 2	8545 6335	5.0 5.6	430 351	17 1	6 12	9284 6635	440 342	2 2	8946 7636	431 383	
	411964	MISSOURI	3	10	9314	4.7	441	2	9	8110	401	4	7642	373	
	429838	MISSOURI	13	16	7354	5.1	375	10	12	8644	416	1	8973	428	
	438205	MISSOURI	4	5	7793	4.9	385	3	6	9197	439	1	9414	455	
	440227	MISSOURI KANSAS	11 1	13 3	8277 8720	4.9 4.4	401 376	9	7	8493	399	1	8901	420	
	458057	MISSOURI	19	32	7179	4.8	347	16	6	8040	391	2	8487	415	
	464165	MISSOURI	1	1	9990	4.7	474	1	1	12940	596	1	8851	508	
	473594	MISSOURI	1	1	6430	4.7	303	1	3	6290	318	1	10061	456	
	475689	MISSOURI	4	5	7281	4.6	334	3	4	10260	462	1	8602	421	
	479368	MISSOURI	5	7	6540	4.8	311	4	7	10993	473	1	8899	432	
	499335	MISSOURI	4	5	8879	4.6	399	4	34	8569	403	1	9118	448	
HOL.	828184	IOWA MISSOURI ARKANSAS	134 14 1	334 17 1	11149 10599 16010	3.6 3.8 3.2	399 401 515	105 12 1	11 12 19	11800 10923 10380	424 420 369	2 1	11158 10818	405 420	
	847834	MISSOURI	4	8	11987	3.7	446	1	12	11366	446	5	9986	400	
	887740	MISSOURI	2	3	8813	3.6	314	1	11	11865	452	2	11909	454	
	904258	MISSOURI	11	30	10685	3.7	394	9	5	11754	418	2	11647	429	

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY NO.	RECORDS NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	MILK LB.	AV. FAT LB.
	908196	MISSOURI	47	84	10807	3.8	407	40	12	10991	413	2	10830	413
	910702	MICHIGAN	2	4	13624	3.4	456	2	14	11350	431	2	12178	437
		MISSOURI	17	34	13008	3.8	490	16	12	11999	468	2	12130	468
	915952	IOWA	4	8	9199	3.7	335	1	2	7800	364			
	928765	MISSOURI	8	11	8463	3.8	321	7	8	10468	376	1	10212	388
	947834	MISSOURI	20	55	12397	3.7	460	13	7	11741	435	2	11969	452
		TENNESSEE	1	1	13690	4.0	546							
	952618	ILLINOIS	4	4	9566	3.4	316	3	10	9833	324	1	10820	349
		MISSOURI	22	44	11881	3.6	424	20	18	11485	430	2	11270	423
		NEBRASKA	1	1	17790	3.5	622	1	1	13910	460	1	13701	477
	970836	IOWA	3	7	12470	3.6	448	3	8	11677	418	1	11750	419
		MISSOURI	18	48	12875	3.6	456	16	9	11716	448	2	11077	437
	980687	MISSOURI	12	26	10836	3.6	386	10	11	11203	432	2	10936	420
	998194	NEW YORK	1	1	8970	4.4	393							
		PENNSYLVANIA	1	1	5850	3.9	228	1	7	7300	278			
		ILLINOIS	276	650	11932	3.5	419	225	10	12347	459	2	11930	441
		MICHIGAN	1	1	10290	3.9	404	1	10	8350	308	1	10311	375
		WISCONSIN	6	12	12238	3.5	423	5	11	11412	424	1	11646	427
		MISSOURI	13	18	12147	3.7	444	12	14	11916	449	1	11568	433
		KANSAS	2	2	12875	3.7	470	1	44	12930	455	1	15151	555
		WEST VIRGINIA	2	9	12070	3.7	443	1	1	11590	445	2	11756	446
		KENTUCKY	2	7	11049	3.4	375	1	9	10498	395	5	8029	308
		TEXAS	1	5	13756	3.1	429	1	8	12084	436			
	1003963	MINNESOTA	1	1	12110	3.7	450	1	15	11050	377			
		IOWA	6	16	12002	3.7	441	5	11	11139	407	3	10974	395
		MISSOURI	7	14	12829	3.2	418	6	15	12325	455	2	11002	431
	1021253	MISSOURI	14	27	12158	3.7	450	13	11	11318	431	2	11794	438
		ARKANSAS	1	3	12037	3.7	443	1	3	12217	448	1	10050	378
	1025570	WISCONSIN	1	2	15985	4.4	696	1	12	12400	462	1	12622	500
		IOWA	118	199	12894	3.7	475	111	14	12939	470	2	12054	460
		MISSOURI	24	51	11882	3.7	436	18	11	11504	419	2	11850	436
		KANSAS	3	7	13190	3.6	479	1	21	11580	434	1	11478	416
	1027992	MISSOURI	15	19	12773	3.5	444	15	17	13660	501	1	13327	485
		KANSAS	1	1	12970	3.4	435	1	44	12950	456	1	15151	555
	1054181	MISSOURI	2	2	11715	4.0	468	2	21	11665	465	1	12726	492
	1055709	MISSOURI	26	46	11902	3.8	455	23	12	11347	447	2	11540	454
	1058767	MISSOURI	3	4	12947	3.6	465	3	9	12008	451	1	10797	383
	1061167	MISSOURI	36	69	10886	3.8	414	32	10	11206	420	2	11445	439
	1064435	MISSOURI	9	15	11199	3.6	419	8	14	12303	471	2	12071	460
	1099131	MISSOURI	18	32	10772	3.6	387	16	9	10430	390	2	10589	406
	1124815	MISSOURI	3	4	10963	3.8	416	2	33	12070	450	1	11801	441
	1141353	MISSOURI	10	13	11602	3.8	432	9	16	11901	433	1	12305	439
		KANSAS	3	3	12760	3.9	489	3	42	12960	453	1	15151	555
	1154152	MISSOURI	13	20	12484	3.9	480	12	12	11066	427	2	10419	423
	1174679	ILLINOIS	22	37	11349	4.1	458	21	15	12762	484	1	12615	479
		MISSOURI	17	21	10405	3.9	405	15	13	11374	436	1	11694	445
		GEORGIA	3	4	14202	4.0	568	3	19	10210	440	1	8971	394
	1187374	MISSOURI	10	13	12849	3.7	474	8	13	12420	476	1	12494	494
		ARKANSAS	2	3	12578	3.4	421	2	19	13178	473	1	12470	448
		TEXAS	1	1	13050	3.5	461	1	29	13360	471	1	11903	413
	1242266	MISSOURI	3	3	10727	3.8	405	3	19	12540	469	1	11783	457
JER.	396001	ALABAMA	1	1	4240	5.2	219							
	416060	MISSOURI	1	5	10934	4.9	534	1	6	8944	463	1	8426	449
	422256	MISSOURI	3	3	6350	5.1	318							
		ARKANSAS	1	6	6467	5.3	446							
	437533	INDIANA	1	2	7470	4.7	350	1	12	6480	336			
		ILLINOIS	1	2	7945	4.8	377	1	13	9005	459	1	8905	461

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		MICHIGAN	1	3	8580	5.7	486							
		MINNESOTA	1	4	8815	5.1	455							
		IOWA	2	3	5508	5.5	298	1	6	8600	494	1	8720	500
		MISSOURI	71	177	8051	5.2	414	1	6	7885	366	2	8404	394
		LOUISIANA	1	6	8005	5.2	415	18	6	8065	423	2	8083	419
		OKLAHOMA	5	5	8326	5.0	420							
		TEXAS	4	7	7564	5.4	403							
	440663	ILLINOIS	1	6	7292	5.0	360	1	4	7208	391	4	7039	381
		WISCONSIN	1	3	9463	4.8	453	1	21	8017	415	3	7278	377
		MISSOURI	73	169	7493	5.3	394	13	6	7766	415	2	7860	402
		OKLAHOMA	1	1	9340	5.2	486							
		TEXAS	1	2	9865	5.3	521							
	440924	MISSOURI	5	6	6029	5.4	326							
		KANSAS	1	2	5700	5.7	326							
		TEXAS	2	3	6895	5.0	335	1	25	8035	413			
	445855	MISSOURI	2	4	6279	5.2	329	1	12	8420	466	1	8524	445
	448686	ILLINOIS	1	4	8525	5.0	430	1	5	8575	473	2	7723	407
	449222	MISSOURI	2	3	9103	4.8	436							
	449541	WISCONSIN	1	1	3940	6.0	237	1	7	5520	301			
		MINNESOTA	2	3	6200	5.5	324	2	5	7525	438	2	5990	320
		IOWA	20	53	6916	5.4	376	10	9	7552	390	2	7596	399
		MISSOURI	42	81	7428	5.4	399	16	12	8223	432	2	8024	425
		KANSAS	1	1	5410	6.0	325							
		LOUISIANA	2	6	6860	5.1	343	1	2	6370	305			
	450982	MINNESOTA	1	2	6810	5.2	352	1	12	6975	363	2	5990	320
		MISSOURI	12	25	7013	5.6	393	5	15	8753	471	1	9154	488
	452510	MISSOURI	7	10	8147	5.1	418	6	10	7754	399	1	8451	433
		TEXAS	5	10	8448	5.0	430					1	7837	366
	455885	MISSOURI	3	12	7462	4.5	334	2	6	7691	398	3	7681	362
	458071	MISSOURI	22	46	8079	5.2	415	8	7	8649	458	1	7963	454
		TEXAS	1	4	7843	4.7	368							
	458832	MISSOURI	21	48	7666	5.1	390	5	4	7841	421	2	7732	400
	459064	MISSOURI	6	12	8056	5.0	403							
	460765	MISSOURI	1	1	8610	5.6	482							
	465178	TEXAS	16	35	6692	5.4	360	3	11	8058	393	2	7470	376
	467898	MISSOURI	5	5	9146	5.4	497	5	10	7932	426	1	8429	439
	468196	ILLINOIS	1	7	8321	5.7	470	1	19	8287	442	6	8522	457
		MINNESOTA	2	3	5003	5.5	274	2	14	6605	348	2	5909	318
		MISSOURI	26	49	7114	5.4	380	17	8	8325	429	2	7906	405
		LOUISIANA	3	6	4840	5.1	252	1	33	5405	283	2	4518	234
	470874	MISSOURI	2	6	7768	5.5	426	2	9	8607	473	3	8315	462
	472178	MISSOURI	3	3	7040	4.9	346							
	475677	MISSOURI	2	4	7632	5.3	399	2	7	7765	384	1	8295	422
	477690	MINNESOTA	1	1	6230	4.5	283	1	4	7060	399	1	6834	390
		MISSOURI	4	8	7688	5.6	427	4	7	9055	462	2	8503	435
	477784	NEW YORK	1	1	8390	4.8	406							
		OHIO	1	1	8890	5.2	460							
		WISCONSIN	1	4	6363	5.8	366							
		IOWA	1	2	3225	5.4	173							
		MISSOURI	18	50	6176	5.5	339	4	5	6479	365	2	6167	336
		ALABAMA	3	4	4417	5.0	222							
		OKLAHOMA	1	6	7265	4.9	352	1	2	7593	417	3	8280	422
		TEXAS	1	1	4100	4.9	199							
	486357	ILLINOIS	1	1	10250	5.0	516							
		MINNESOTA	2	5	8721	5.6	483	2	6	7658	382	2	7235	387
		IOWA	2	5	7345	4.6	338	1	19	6805	359	2	7156	375
		MISSOURI	11	34	6487	5.5	356	4	5	6002	332	3	6067	331
		MISSISSIPPI	1	3	6983	5.1	356							
	486358	MINNESOTA	3	5	5780	5.3	303	2	8	6158	322	2	6993	361
		MISSOURI	19	57	7692	5.4	409	15	9	8384	451	3	8262	442

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY NO. RECORDS	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
	491151	MISSOURI	3	3	7960	5.4	429	1	20	8600	444	1	10464	554
	498379	MISSOURI TEXAS	4 1	7 2	7983 8225	5.2 4.7	409 383	4 1	7 6	8536 5260	441 268	1 1	8173 7074	415 346
	504893	MINNESOTA MISSOURI KANSAS	1 10 1	2 14 1	6810 7393 9540	6.1 5.5 5.9	416 406 560	1 8	15 11	8140 8107	412 416	1 1	7924 7699	399 397
	506659	MISSOURI	5	8	8166	5.6	457	5	13	8877	479	1	9252	494
	506949	MISSOURI	18	31	7449	5.0	372	15	11	7621	404	1	7630	419
	509120	MISSOURI LOUISIANA	3 1	4 1	7390 7920	5.1 5.5	378 455	2 1	14 32	9430 6830	491 348	1	7719	453
	509517	MISSOURI TEXAS	1 1	2 3	8645 6693	5.3 4.9	456 326	1 1	8 11	9640 7305	495 354	2	9494	523
	509520	MISSOURI	1	1	6850	4.8	330	1	4	8570	388	1	9221	401
	510369	MISSOURI	10	14	7056	5.3	372	8	12	7665	407	1	7632	409
	514622	MINNESOTA MISSOURI TEXAS	1 7 1	2 12 1	5235 7013 8050	5.3 5.4 5.2	280 373 415	1 6	10 10	7850 8386	406 456	2 1	7456 8428	396 453
	514628	MINNESOTA MISSOURI	2 1	3 1	7788 9450	4.7 5.2	368 493	2 1	7 16	6983 7510	352 395	1 1	9151 9080	374 465
	516718	MISSOURI	3	3	8983	5.1	455	3	7	8553	435			
	518863	IOWA MISSOURI TEXAS	1 6 8	1 6 18	3960 7937 8938	4.8 5.5 5.2	190 435 462	5 6	12 13	8486 9030	434 435	1 2	8997 8195	447 395
	523421	MISSOURI	6	6	8203	5.2	425	6	7	7807	400	1	8596	447
	524674	MISSOURI	2	3	7990	5.2	413	2	12	7850	402	1	8600	436
	526993	MINNESOTA MISSOURI	1 10	1 14	6960 8672	5.7 5.1	393 442	1 6	2 10	6040 8538	313 438	2	8443	442
	531272	ILLINOIS MISSOURI	1 16	1 23	4710 8247	5.5 5.2	257 425	10	8	7787	409	1	8043	421
	538412	MISSOURI	1	1	9340	4.8	446	1	8	8480	400	1	8044	392
	540078	MISSOURI	3	3	6357	5.0	328							
	541597	MISSOURI	4	4	7460	5.3	392	4	13	8713	427	1	8845	466
	542914	MISSOURI	1	1	6010	6.2	372	1	13	9860	572	1	9592	510
	543195	MINNESOTA MISSOURI	1 6	1 8	1610 8000	4.6 5.3	74 432	4	11	8680	457	1	8965	466
	550015	MISSOURI KANSAS	1 1	1 1	5730 7670	5.5 5.6	317 429	1	36	6740	348			
B.S.	69477	ARKANSAS	3	6	12498	4.0	494							
	79929	MISSOURI ARKANSAS	1 1	1 3	11490 8960	4.0 4.1	461 366							
	82373	ARKANSAS	2	4	7700	4.6	346							
	95448	NEBRASKA	6	6	11878	4.4	515	5	3	11230	490	1	11617	487
M.S.H.	13755	MISSOURI	2	2	9210	4.1	371	1	3	8640	366	1	6398	266
	38713	MISSOURI	3	6	9684	4.0	380	3	18	10112	410	2	6344	307
	38759	MISSOURI	6	12	9321	4.4	411	5	7	8784	346	2	8107	308
	42837	MISSOURI	7	11	7838	4.2	325	6	13	9360	384	2	6099	318
	42839	MISSOURI	12	16	7842	4.1	321	11	12	9263	374	1	7589	308
	59331	MISSOURI ARKANSAS	5 1	10 1	6766 7050	3.9 3.5	269 245	3 1	12 23	9067 6000	349 264	1	7787	314
	71726	MISSOURI	4	4	10290	4.1	423	3	15	9727	394	1	9592	378

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
003 GUER	156327	MISSOURI	1	1	10990	4.2	458	1	10	6410	262			
	270309	MICHIGAN	1	1	9440	4.5	424							
		IOWA	2	4	5349	5.1	272							
		MISSOURI	3	5	8248	5.1	423	1	20	9030	460			
		TEXAS	1	1	6060	4.6	278	1	26	9500	381			
	290210	IOWA	1	3	6150	5.4	333							
		MISSOURI	4	10	8663	4.7	398							
	310762	MISSOURI	2	3	7320	5.2	379							
	367825	MISSOURI	4	12	7629	5.0	378	1	3	9285	433	3	8150	388
	HOL. 779113	MISSOURI	3	7	9939	3.8	374	1	5	11408	403	1	11401	409
	813033	IOWA	3	10	12323	3.7	457	1	4	11010	477	1	5624	289
		MISSOURI	7	18	12348	3.6	437	2	11	11067	396	3	10665	367
	876560	MISSOURI	1	1	8930	3.9	344	1	4	9040	340			
	885172	IOWA	2	6	11928	3.9	452	1	6	12850	494	3	11169	443
		MISSOURI	17	49	11065	3.5	386	8	11	10123	349	3	9660	326
	901667	MISSOURI	6	21	9827	3.5	345	5	11	10149	368	3	10125	373
		KANSAS	1	5	14944	3.8	576							
	928763	MICHIGAN	1	1	17680	3.3	587							
		MISSOURI	11	26	12557	3.7	463	8	12	12095	449	2	11633	427
	936928	KANSAS	2	4	11785	3.5	404							
004 GUER	960287	MISSOURI	1	2	7975	3.2	252	1	13	10010	341	1	9211	301
		KANSAS	1	8	10201	3.6	366	1	1	12733	488	3	13164	463
	964715	MISSOURI	6	23	8603	3.6	308	6	9	9613	341	4	9156	326
		KANSAS	1	5	10080	3.5	356							
	977103	IOWA	1	1	13960	3.3	464	1	1	16080	539			
		MISSOURI	15	30	9730	3.8	372	14	6	10380	400	2	10962	415
	JER. 397468	MISSOURI	5	7	5371	5.6	299							
	408649	IOWA	1	1	3410	6.1	208							
		MISSOURI	6	14	6379	5.4	343	1	10	6840	332	3	7779	381
	447222	MISSOURI	3	4	5903	5.0	289							
	470097	IOWA	1	2	7520	4.8	362							
		MISSOURI	19	79	7079	5.2	366	17	11	7162	342	4	7342	364
	473346	MISSOURI	1	1	6900	5.5	379							
	489791	MISSOURI	2	2	2665	5.4	137							
	349837	MISSOURI	5	7	7639	4.9	370	2	12	6920	346	1	11271	519
	372716	MISSOURI	1	1	9710	4.6	449							
		KANSAS	1	2	7335	5.0	364							
	378495	MISSOURI	10	19	7361	4.9	362	3	11	7888	377	2	7586	366
005 GUER	HOL. 852714	NEW YORK	1	1	8210	3.8	312							
		MISSOURI	2	3	13603	3.4	463	1	4	11600	393	2	9287	334
	JER. 422916	MISSOURI	8	18	5987	5.1	301	1	8	6865	372	2	6671	384
		OKLAHOMA	1	1	5850	5.9	347							
	440745	MINNESOTA	2	6	6679	5.1	336	1	13	5595	292	1	5232	274
		MISSOURI	18	38	6823	5.3	361	6	7	7640	403	3	7565	393
		KANSAS	3	5	6598	5.2	338							
		ARKANSAS	1	1	3490	4.8	169							
	444268	MINNESOTA	2	7	8132	5.1	409	1	7	7210	379	2	7456	373
		MISSOURI	20	43	7627	5.4	408	5	7	8580	441	1	7881	424
		ARKANSAS	3	11	10433	5.6	586							
	450869	MINNESOTA	5	11	7281	5.1	364	2	5	6762	337	3	6838	357
		MISSOURI	12	25	7582	4.9	370	2	5	10305	445	3	9189	410
		KANSAS	2	3	8298	5.2	426							
		OKLAHOMA	1	2	6125	4.4	269							
	401876	MISSOURI	8	22	5977	5.6	327	3	8	7720	421	1	7009	342
		KANSAS	1	1	4760	4.4	209							
		ARKANSAS	3	10	8018	5.7	451							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE OKLAHOMA	DAUGHTERS NO. 4	RECORDS NO. 8	MILK LB. 6053	TEST PCT. 5.4	FAT LB. 322	305-DAY CONTEMPORARY			AV.			YEARLY HERO			AV. FAT LB.
									NO.	RECORDS	MILK LB.	FAT LB.	RECORDS	MILK LB.	FAT LB.	NO.	MILK LB.	
006	GUER	450981	OHIO	1	1	6440	5.4	347	2	5	6532	364	1	7892	354			
		MISSOURI OKLAHOMA	11	25	8887	5.1	454											
			1	1	8640	4.9	425											
			259387	MISSOURI	1	1	5480	5.2										
JER.	408166	MISSOURI	2	10	7222	4.8	343											
	426161	IOWA MISSOURI	1 4	2 12	5525 7026	5.5 5.0	305 349											
008	JER.	383102	MISSOURI	2	3	7353	5.4	394										
009	JER.	408648	MISSOURI	2	4	5358	5.2	274										
075	JER.	473042	MISSOURI	2	3	8590	5.4	468	2	9	7693	401	1	7815	391			

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV. FAT LB.	YEARLY HERD			AV. FAT LB.
									NO.	RECORDS	MILK LB.		NO.	RECORDS	MILK LB.	
ODI	GUER	310763	SOUTH DAKOTA	4	4	6515	4.9	321	1	3	6200	296	1	7325	341	
		354143	SOUTH DAKOTA	4	5	7035	5.0	346								
		398644	SOUTH DAKOTA	2	4	6448	4.5	289								
		438178	SOUTH DAKOTA	1	1	8820	4.9	434	1	11	9330	415	1	9047	415	
		488892	SOUTH DAKOTA	1	1	10710	4.0	432								
	HDL	769336	SOUTH DAKOTA	7	16	12944	3.4	438	5	34	12764	456	2	10516	420	
		777842	MINNESOTA	1	1	12330	3.6	450	1	2	11360	410	1	14584	545	
			SOUTH DAKOTA	7	13	12004	3.6	430	2	40	11945	430	2	11501	403	
			MONTANA	1	1	14720	3.6	532								
		796016	MINNESOTA	1	2	14245	3.6	503								
			SOUTH DAKOTA	4	7	13563	3.3	449	2	4	12030	431	2	12359	421	
		811304	MINNESOTA	1	3	17570	3.2	554								
			IOWA	2	7	13203	3.6	474								
			SOUTH DAKOTA	7	8	12750	3.6	460								
		895361	MINNESOTA	2	5	17577	3.4	590	2	10	15719	551	1	14323	512	
			SOUTH DAKOTA	25	37	13117	3.3	435	18	5	12727	450	1	12118	427	
		898764	SOUTH DAKOTA	1	2	13850	3.6	489								
		900839	SOUTH DAKOTA	2	6	15825	3.3	511	1	4	11450	386	2	11619	382	
		900841	MINNESOTA	1	1	7730	3.2	244	1	5	11800	376				
			SOUTH DAKOTA	4	5	11851	3.3	392	3	5	9517	330	1	11521	396	
		958336	SOUTH DAKOTA	2	2	13565	3.3	440	1	4	14380	495	1	12524	410	
		964281	SOUTH DAKOTA	9	14	11323	3.8	425	7	11	11389	397	1	11649	404	
		979056	SOUTH DAKOTA	23	37	13559	3.4	462	14	17	11701	409	1	11305	400	
		988958	SOUTH DAKOTA	4	4	10888	3.5	375	4	24	10528	360	1	11206	379	
		1065089	MINNESOTA	1	1	9680	3.5	339	1	27	8840	312	1	11576	385	
			SOUTH DAKOTA	2	4	10245	3.6	367	1	12	12660	438	2	12127	433	
JER.		1065743	NORTH DAKOTA	1	1	14750	3.5	517	1	4	12480	494				
			SOUTH DAKOTA	14	24	11963	3.4	405	12	6	11779	407	2	12295	449	
		1139172	SOUTH DAKOTA	4	7	10615	3.7	385	4	15	9281	332	2	7650	373	
		1140379	SOUTH DAKOTA	5	7	10941	3.4	370	4	17	10444	370	2	10662	384	
		459173	SOUTH DAKOTA	2	3	5848	5.8	336								
		461526	SOUTH DAKOTA	1	5	5150	6.2	317								
	B.S.	42937	ILLINOIS	1	2	9335	4.4	404	1	9	11950	504	2	11625	476	
			MINNESOTA	1	1	8830	4.0	352								
			SOUTH DAKOTA	1	1	5650	5.0	282								
		48097	SOUTH DAKOTA	2	2	12825	3.8	478								
		53915	SOUTH DAKOTA	4	9	8611	4.3	370								
		55258	NEW JERSEY	1	1	9670	3.7	356								
			SOUTH DAKOTA	4	4	6563	4.0	263								
		67182	SOUTH DAKOTA	10	23	12144	4.0	489	3	4	13343	523	2	11090	450	
		73013	SOUTH DAKOTA	8	22	12990	3.8	498	1	5	13678	548	3	11323	457	
		94469	SOUTH DAKOTA	1	2	10870	3.8	415								
M. SH		103529	SOUTH DAKOTA	1	1	8200	4.4	360	1	7	9050	394	1	8371	363	
		110816	SOUTH DAKOTA	1	1	5220	3.5	180	1	3	5080	180				
		117840	SOUTH DAKOTA	3	3	11363	4.2	486	3	8	10957	455	1	9795	406	
			NEBRASKA	1	1	8340	4.2	348	1	12	10240	425	1	9189	393	
		1818	NEBRASKA	1	1	8330	3.8	315					1	9854	335	
		4834	IOWA	1	1	4300	4.0	172	1	4	12990	484	1	7423	281	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS ND.	RECDRDS ND.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPDRARY			AV. YEARLY HERD			
								NO.	RECORDS	MILK LB.	FAT LB.	RECDRDS	MILK LB.	FAT LB.
	26598	KANSAS	2	2	7715	4.1	314	DAUS.	NO.	LB.	LB.	NO.	LB.	LB.

TABLE 16.--DAUGHTER--AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAUS.	CONTEMPORARY NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	MILK LB.	AV. FAT LB.
001 GUER	377129	SOUTH DAKOTA NEBRASKA	9	33	7458	4.5	334	2	9	10011	470	5	8805	428
			3	7	7711	4.7	361	3	3	9506	463	1	9657	487
	430540	NEBRASKA	1	3	8403	5.6	470	1	7	9063	441	3	9327	462
	444047	IOWA	6	7	6805	5.0	335							
	512142	IOWA	1	1	6920	4.6	317							
HOL.	813295	NEBRASKA	40	139	11574	3.8	436	22	7	12095	440	2	12223	452
			108	204	10330	3.3	339	79	6	11613	431	2	11683	452
	922499	NEW YORK NEBRASKA KANSAS	4	14	12829	3.5	449							
	934490	NEBRASKA	71	154	12641	3.7	457	64	8	11650	434	2	11632	433
	934492	NEBRASKA KANSAS	64	121	12552	3.6	446	57	6	11729	435	2	11764	434
	967686	NEBRASKA	1	2	9960	3.9	389							
	977522	NEBRASKA	21	28	11637	3.7	426	20	8	11554	424	1	11830	431
	977522	NEBRASKA	19	25	11245	3.8	432	19	9	11946	435	1	11589	422
	985034	MINNESOTA NEBRASKA TENNESSEE	19	43	14125	3.5	487							
			11	16	12405	3.7	454	11	12	11935	440	1	11950	452
			1	1	7430	3.7	272							
	1006142	IOWA MISSOURI NEBRASKA KANSAS	1	4	15650	3.4	517	1	25	13165	452	4	10003	454
			1	1	12320	3.9	486							
			84	186	11493	3.8	435	74	7	11778	438	2	11519	430
			3	9	12007	3.7	446							
	1011497	NEBRASKA	13	22	11533	3.7	428	9	8	11283	428	2	10765	403
	1014754	NEBRASKA	18	28	11749	3.7	437	16	23	12602	444	1	11459	424
	1046969	NEBRASKA	4	5	10965	3.6	390	4	8	11980	452	1	12024	442
	1059887	IOWA NEBRASKA	8	21	14876	3.7	545							
			8	9	13793	3.6	503	7	3	12740	473	1	11655	433
	1114116	NEBRASKA	1	1	13890	3.8	534	1	5	13300	476			
	1125792	NEBRASKA	19	26	11177	3.7	410	19	12	11682	414	1	12303	431
	1140217	NEBRASKA	3	3	12550	3.9	487	1	29	13500	484	1	12415	451
	1162505	NEBRASKA WYOMING	3	3	12117	3.6	428	2	8	12915	477	1	10671	385
			1	2	17875	3.8	665	1	9	14300	529			
	1174718	NEBRASKA	12	20	11397	3.6	403	11	19	11761	430	2	12873	463
	1217100	NEBRASKA	23	41	12052	3.9	469	2	8	11055	407	1	10181	377
JER.	498863	NEBRASKA	1	1	5440	5.4	295							
	513807	NEBRASKA	4	4	7975	5.1	410	3	3	8243	401	1	7699	405
	546769	NEBRASKA	2	2	9170	4.7	427	2	10	8015	427	1	7477	399
	552954	NEBRASKA	1	1	9610	6.0	580	1	15	7580	413			
	566042	NEBRASKA	1	1	8730	5.7	498	1	14	8010	443	1	9243	495
B.S.	93293	NEBRASKA KANSAS COLORADO	10	13	9753	4.3	416	6	5	9849	415	1	11065	450
			1	1	8940	5.0	446							
			13	15	10362	4.2	429	13	22	10274	407	1	10911	433
	111678	NEBRASKA	1	1	8540	4.1	354	1	6	11110	487	1	11478	494
M.SH	65567	NEBRASKA	1	2	5850	3.4	202	1	4	6485	249	2	7151	274
			1	1	5410	3.8	207	1	4	5690	215	1	6453	243
003 GUER	273436	NEBRASKA	7	19	7488	5.0	370	1	8	9011	453	1	9134	475
	294748	NEBRASKA	7	33	9093	4.7	427	6	8	9517	450	3	9085	462
	300683	NEBRASKA	2	9	7799	5.0	382	1	7	9200	463	1	9134	475
	301661	NEBRASKA	1	2	9430	5.1	480							

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	MILK LB.	AV. FAT LB.
		337022	NEBRASKA	20	35	7781	5.2	406	2	8	9220	463	1	9205	451
		348167	NEBRASKA	2	7	5262	4.7	246	1	1	12760	501	1	10704	408
		352202	NEBRASKA	3	7	7895	5.3	421	1	13	9216	452	1	9134	475
		369127	NEBRASKA	1	4	7723	5.6	439	1	2	10365	467	2	8235	409
		394949	MARYLAND	12	34	7643	4.5	342	2	4	9370	416	3	8854	373
HOL.		743211	IOWA	1	1	6840	3.8	262							
			NEBRASKA	11	31	11034	3.7	405	3	6	14263	494	2	12657	458
		764799	NEBRASKA	37	84	11934	3.8	452	8	3	12169	447	2	11340	415
			KANSAS	1	3	9303	3.9	366							
		800348	NEBRASKA	7	23	10036	3.7	369							
		809405	NEBRASKA	5	13	13096	3.3	426							
		814569	IOWA	1	1	9330	3.7	349							
			NEBRASKA	6	20	10662	3.8	397							
		830085	NEW YORK	1	1	14240	3.8	548	1	31	15030	560	1	14900	561
			NEBRASKA	18	48	10340	3.6	371	6	6	11299	420	2	10630	395
			KANSAS	1	3	11077	3.3	369							
		836796	OHIO	1	1	11080	3.3	360							
			NEBRASKA	4	17	11346	3.8	425	1	5	12833	482	3	12920	476
		887891	NEBRASKA	5	12	10418	3.7	384	4	8	10981	427	2	10782	401
		909753	IOWA	1	1	13180	3.6	468							
			NEBRASKA	4	6	12224	3.6	431							
		920201	NEBRASKA	2	7	11462	3.5	393	1	4	9795	371	1	11728	412
		934484	NEBRASKA	1	3	14303	3.4	483							
		961106	MISSOURI	1	3	10183	3.5	358	1	2	10963	407	2	9930	341
			NEBRASKA	2	6	9155	4.1	360	2	7	11402	426	2	10508	398
		968330	NEBRASKA	1	2	12855	4.1	524							
		1034699	NEBRASKA	1	1	11590	3.6	417							
		1035339	NEBRASKA	6	11	10606	3.5	374	3	4	9974	348	2	10236	370
JER.		442283	NEBRASKA	3	7	5987	5.0	288							
B.S.		46351	NEBRASKA	2	3	6375	4.3	268							
		49517	NEBRASKA	2	2	7630	4.2	324							
		59486	NEBRASKA	2	7	11135	3.9	435							
		83141	NEBRASKA	2	2	10705	4.0	427	2	9	10925	434			
M.SH		3266	NEBRASKA	8	17	6407	4.1	263	2	4	7015	289	3	6152	245
		2272401	NEBRASKA	1	1	11660	3.7	432							
004	GUER	306848	NEBRASKA	4	11	7577	5.4	412	1	3	8023	422	3	6933	342
		369128	NEBRASKA	3	8	6672	5.2	347	2	15	9004	382	2	8876	385
		381953	NEBRASKA	2	4	7182	4.8	349							
HOL.		772753	NEW YORK	1	1	8670	3.6	316							
			NEBRASKA	4	7	12636	3.9	489							
		802900	PENNSYLVANIA	1	1	13260	3.7	484							
			MISSOURI	9	22	11462	3.4	385	3	8	10753	385	1	9930	341
			NEBRASKA	21	43	10144	3.6	360	2	2	12075	467	3	7597	292
		826194	NEBRASKA	8	22	11615	3.7	428	2	6	11574	441	1	8862	340
		838593	NEBRASKA	5	8	9685	3.7	363	1	3	11005	386			
		922496	NEBRASKA	4	13	11276	3.7	415	3	5	10425	380	1	9593	367
JLR.		428439	NEBRASKA	6	6	6418	5.5	350							
		431366	NEBRASKA	1	1	3170	5.6	178							

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
005	GUER	354778	NEBRASKA	1	1	8040	4.4	355							
	HOL.	884709	NEBRASKA	1	1	10310	3.7	377							
		895909	NEBRASKA	46	109	12181	3.7	448	26	17	13417	478	3	12588	453
		934483	NEBRASKA	14	24	11741	3.8	446	3	3	12025	456	2	10534	421
		950620	NEBRASKA	3	5	11369	3.7	421	3	5	11213	403	2	11184	415
		54642	NEBRASKA	3	4	10288	3.9	396	3	4	10640	421	1	8546	403
	61917	NEBRASKA	1	2	7705	3.8	292	1	5	11330	470				
	83136	NEBRASKA	1	3	8010	4.1	328	1	5	10355	419	1	9952	399	
006	GUER	266512	NEBRASKA	9	15	8110	5.1	405	4	10	10419	439	2	11192	443
	HOL.	321996	NEBRASKA	15	25	6896	4.8	328	1	3	9030	418			
		365809	NEBRASKA	10	28	8732	4.8	416	6	7	9244	413	2	9097	422
		428555	NEBRASKA KANSAS	1 1	1 1	6760 8010	3.9 4.5	264 362							
		440147	NEBRASKA	3	9	9002	5.0	449	3	6	8676	408	5	9097	453
		897790	NEBRASKA KANSAS	30 4	65 12	11258 10733	3.8 3.7	422 398	9	6	12619	473	2	11624	440
		922497	NEBRASKA KANSAS	26 1	67 1	13326 13270	3.6 3.1	481 416	18 1	13 6	13456 12550	486 419	2	13237	473
		930323	NEBRASKA KANSAS	37 1	84 1	12236 14880	3.6 3.8	441 571	16 1	6 1	13019 14880	483 571	2	12436	464
		934489	NEBRASKA COLORADO	11 2	37 5	13391 10644	3.6 3.7	479 381	6 2	8 2	13341 11540	474 390	3 3	12864 12295	450 443
		943402	NEBRASKA COLORADO	13 1	31 1	13256 13780	3.6 3.7	477 507	9	8	12971	445	2	12621	447
		992574	NEBRASKA	2	3	12070	3.7	427							
		1011498	NEBRASKA	35	78	12636	3.5	434	32	8	13084	453	2	12713	445
		1063187	NEBRASKA	13	20	11932	3.7	436	9	14	11732	453	1	11633	443
		JER.	401034	NEBRASKA	10	55	8454	5.3	445	1	8	9270	480		
	B.S.	461174	NEBRASKA KANSAS	10 1	25 1	7861 6960	5.2 4.9	412 342	6	2	8150	408	2	8053	404
		467196	NEBRASKA	1	3	9623	4.9	476	1	1	8150	417	1	9450	493
		57361	NEBRASKA	1	2	10645	3.7	393	1	3	11570	515	1	10780	455
		85034	NEBRASKA COLORADO NEW MEXICO	1 1 1	5 1 1	10806 5360 10200	4.6 4.1 4.3	492 222 438	1 1 1	1 1 1	12747	516	5	10122	422
M. SH		2250304	NEBRASKA	1	1	4220	4.4	184							
	2281374	NEBRASKA	2	2	5560	3.4	187	1	6	10020	349	1	8753	304	
007	GUER	392125	NEBRASKA	1	1	7120	5.0	356	1	23	10180	384	1	9527	367
		392543	NEBRASKA KANSAS	7 1	15 1	8756 5560	4.5 5.2	383 289	6	9	9241	404	2	9997	440
		417336	NEBRASKA KANSAS	5 2	14 3	9013 5843	5.2 5.4	468 316	3	6	9425	415	2	10075	473
		428864	NEBRASKA	9	14	7094	5.1	364	7	8	9210	393	2	9150	428
		431200	NEBRASKA KANSAS OKLAHOMA	6 1 1	9 2 1	8477 8770 9360	5.1 5.0 5.0	425 430 466	2	14	10485	426	2	10936	441
	HOL.	922498	ILLINOIS NEBRASKA KANSAS	1 69 2	2 185 8	9820 12939 10501	3.5 3.6 3.6	342 468 378	1 50	11 7	12230 12482	452 463	2 2	10492 12290	381 457
		934488	ILLINOIS NEBRASKA	1 62	2 158	9910 11870	3.5 3.6	350 423	1 39	8 6	11100 11595	411 426	2 2	10693 11180	387 413

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
									NO.	RECORDS	MILK	FAT	NO.	MILK	AV.
									DAUS.	NO.	LB.	LB.	NO.	LB.	FAT
			KANSAS	6	15	11027	3.6	390							
			MARYLAND	1	1	13830	3.5	480							
			VIRGINIA	1	1	11070	3.3	361	1	1	10640	394			
		1036120	ILLINOIS	1	1	12380	3.5	433	1	12	11410	414	1	10268	370
			NEBRASKA	22	43	12405	3.8	464	17	9	12524	472	2	11141	421
		1082864	NEBRASKA	7	14	12202	3.6	432	6	14	12440	444	2	12513	441
		1084009	NEBRASKA	11	16	12405	3.6	435	11	9	11454	408	2	12098	442
		1089774	NEBRASKA	8	13	10332	4.0	406	8	12	10723	379	1	11843	425
		1124854	NEBRASKA	10	17	13689	3.7	498	10	10	13076	515	2	10569	391
		1200510	NEBRASKA	9	11	12851	3.6	457	9	18	12308	456	1	12720	455
JER.		488471	MISSOURI	1	1	7290	4.9	359	1	10	7790	398	1	7554	389
			NEBRASKA	9	27	7220	5.3	378	4	6	8947	456	2	8538	421
		490528	NEBRASKA	4	9	8084	5.2	419	2	3	7740	438	1	7150	365
		508065	NEBRASKA	6	9	7881	5.6	432	1	7	9070	462			
B.S.		73029	NEBRASKA	3	8	12489	4.0	500	1	2	13077	547	2	9914	393
		86244	NEBRASKA	5	11	8965	4.6	406	1	1	13280	538	3	11067	428
			KANSAS	1	1	11260	4.2	473							
		86489	MINNESOTA	1	4	13935	4.0	555	1	31	12320	515			
			SOUTH DAKOTA	1	1	17150	4.3	739							
			NEBRASKA	8	11	9807	4.3	424	8	4	10454	445	1	11532	449
		87086	NEBRASKA	1	2	10695	4.3	462	1	3	12935	536	2	10563	440
		94593	ILLINOIS	1	1	10810	4.6	493	1	3	11640	488	1	12829	525
			MINNESOTA	2	9	10288	4.4	450	2	9	9995	414	3	9963	418
			NEBRASKA	7	9	11566	4.4	504	3	3	10760	445	2	10331	429
		103834	NEBRASKA	3	3	11563	4.1	471	2	2	11175	495	1	10933	465
M.SH		2317822	ILLINOIS	1	1	10660	4.0	430	1	5	8130	298			
008	HOL.	833059	NEBRASKA	4	6	12489	3.6	458	1	4	10460	412	2	11947	464
		871844	NEBRASKA	18	52	13404	3.5	470	5	12	12839	462	1	13876	487
		903498	NEBRASKA	2	5	12790	3.5	440	1	3	11348	453	4	11928	422
009	HOL.	842465	NEBRASKA	32	84	11437	3.6	409	28	11	11972	424	2	11444	405
		1008045	NEBRASKA	10	15	10051	3.6	355	9	16	12369	439	1	11594	416
			KANSAS	1	1	11600	3.7	438							
		1122495	NEBRASKA	9	15	12454	3.6	445	8	13	11978	426	2	12450	437

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
								ND.	RECORDS	MILK LB.	FAT LB.	NO.	RECORDS	AV. MILK LB.
001 AYR.	69998	NORTH DAKOTA	1	2	6510	4.3	280	1	5	7435	296			
		SOUTH DAKOTA	1	2	9175	4.8	438	1	2	10055	371	2	9821	394
		NEBRASKA	1	1	8490	4.7	396							
		KANSAS	45	91	9107	4.3	388	6	11	9486	399	1	9420	397
		OKLAHOMA	2	5	7927	4.3	342	2	8	8550	346	2	8266	331
	72904	KANSAS	41	101	9564	4.0	384	3	19	9472	388	2	9774	387
		OKLAHOMA	1	2	7660	4.4	327	1	8	9730	399	1	9538	377
		TEXAS	1	1	13740	4.2	583	1	1	5640	209	1	10083	425
	77392	KANSAS	9	10	8332	4.0	340	4	14	9205	382	1	8746	388
		MARYLAND	1	1	600	4.2	25	1	85	11690	479	1	13058	508
	80261	NORTH DAKOTA	1	1	6660	3.7	249	1	5	4720	191	1	6791	273
		KANSAS	40	80	8907	4.2	369	4	19	9555	394	2	8904	368
	80263	KANSAS	4	11	8497	4.1	346	2	14	10123	414	1	11216	464
	82375	KANSAS	11	18	9078	4.2	379	2	6	11775	469	1	11156	444
		TEXAS	1	1	10100	4.1	418							
	83226	KANSAS	2	5	7078	4.2	299							
	83434	NEBRASKA	1	2	6810	3.8	254	1	4	7160	389	1	6377	279
		KANSAS	5	17	9095	4.2	380					3	9508	397
	85334	SOUTH DAKOTA	1	3	9023	4.1	373	1	7	9633	406	3	9440	411
		NEBRASKA	1	2	7170	4.2	300	1	3	9045	396	1	7772	332
		KANSAS	10	21	8902	4.1	365	1	1	14050	564	1	13004	474
	86581	KANSAS	1	1	10050	4.1	407					1	8709	402
	88074	MINNESOTA	1	2	11660	4.3	498			11210	457	2	6017	441
		IOWA	1	2	9565	4.1	389	1	27	11490	472			
		SOUTH DAKOTA	2	4	10869	4.3	466	2	7	11873	475	2	11266	456
		KANSAS	23	32	9807	4.2	415	12	14	9476	399	1	9515	416
		TEXAS	1	1	7080	3.8	271							
		OREGON	1	1	13840	4.0	557	1	33	10940	409			
	88330	KANSAS	1	2	10195	4.6	467							
	91718	MINNESOTA	1	1	8570	4.5	384	1	11	10960	433			
		KANSAS	23	31	8901	4.3	384	15	13	9141	371	1	9761	399
		OREGON	1	1	11400	3.9	443	1	2	12190	505			
	94201	KANSAS	2	2	8465	4.3	362	1	21	8810	367	1	9014	373
		ARKANSAS	1	1	6730	4.2	281	1	25	9350	376			
	94934	KANSAS	39	46	9177	4.3	392	25	15	9860	401	1	9618	403
		MARYLAND	1	1	8110	4.5	369	1	139	12160	492	1	11074	447
		OKLAHOMA	1	1	5370	4.2	226	1	15	9570	401	1	9429	386
	96407	KANSAS	18	27	9441	4.1	389	3	34	11027	438	1	8748	354
		OKLAHOMA	1	1	8130	4.5	366	1	5	8300	340	1	7565	307
	97587	KANSAS	1	1	8260	4.5	368	1	1	7270	306	1	8807	362
	99207	KANSAS	20	22	10353	4.2	430	18	13	9891	406	1	9646	401
	104944	KANSAS	23	27	9119	4.2	386	10	16	10542	426	1	10210	418
		MARYLAND	1	1	12390	4.4	550	1	2	9820	405			
GUER	271885	KANSAS	17	33	7691	5.1	390	1	31	9050	449	1	10224	504
	309504	KANSAS	3	4	7525	5.0	369					1	5668	278
	326996	KANSAS	1	3	9490	4.1	389							
	343004	KANSAS	7	16	7381	4.8	350					1	6932	342
	348166	NEBRASKA	1	1	10280	4.9	502							
		KANSAS	26	47	7443	5.0	365	1	25	6240	266	2	8393	409
	351515	NEBRASKA	1	1	7330	5.1	374	1	4	7590	363	1	7979	365
		KANSAS	2	2	7925	5.5	430							
	371681	KANSAS	23	48	8074	4.9	392							
	377826	KANSAS	10	20	7633	5.5	416							
	385517	KANSAS	2	2	5410	4.9	256							
	387707	KANSAS	2	3	9193	5.1	455	2	10	9055	452	2	9254	472

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
	401624	KANSAS	10	20	6834	4.9	334					1	9570	470
	421336	KANSAS	17	34	7454	5.2	386	2	7	7595	410			
		OKLAHOMA	1	2	8575	6.5	559	1	6	7740	383	1	10322	484
	436535	KANSAS	2	3	6255	5.5	348							
HOL.	812518	MISSOURI	2	3	12633	4.1	512	1	2	10070	415	1	13494	512
		NEBRASKA	1	1	13970	3.7	514	1	17	11630	423	1	10933	383
		KANSAS	87	98	11834	3.8	443	41	17	12345	467	1	11447	428
		TENNESSEE	1	1	12720	3.6	454							
	835612	KANSAS	47	87	12371	3.7	458	5	5	11674	429	2	12349	455
	876629	MISSOURI	4	9	11868	3.8	439	2	3	13560	491	2	11944	451
		KANSAS	15	54	12602	3.4	433	3	3	13949	516			
	886182	MISSOURI	2	3	13910	3.9	533	1	14	13230	511	2	13740	522
		NEBRASKA	8	17	13876	3.6	498	7	30	13480	497	2	13381	495
		KANSAS	315	513	11799	3.7	436	67	16	12488	468	1	12030	449
		MARYLAND	2	3	11930	3.6	423	2	137	12120	492	2	11570	463
		TENNESSEE	1	1	11660	3.5	407							
		OKLAHOMA	1	4	13680	4.0	548	1	12	9883	496	3	9381	460
	900759	NEBRASKA	1	2	8595	4.2	357					2	9543	370
		KANSAS	10	16	12419	3.7	459	5	17	11624	434	1	13200	487
	911120	NEBRASKA	3	13	12687	3.4	426	3	29	12258	440	4	11861	426
		KANSAS	227	447	11257	3.5	396	12	11	11920	439	1	11874	433
		OKLAHOMA	1	3	9210	3.6	325	1	14	9967	382	2	11026	430
	934020	NEBRASKA	2	3	16183	3.7	587	2	45	12650	458	2	11301	410
		KANSAS	21	52	13276	3.6	475	4	2	14252	511	2	12448	441
	936020	KANSAS	38	80	11552	3.7	421	6	12	12519	469	2	11920	448
	936022	NEBRASKA	2	6	14137	3.7	513	1	33	14115	536	2	14601	543
		KANSAS	24	38	11848	3.7	437	3	40	11731	434	1	11102	395
	939457	MISSOURI	1	1	11220	3.7	417							
		NEBRASKA	1	3	12090	3.3	403	1	31	12710	447	3	12008	432
		KANSAS	136	201	11231	3.7	412	20	11	12113	446	1	11376	422
	966167	KANSAS	41	58	11677	3.7	434	4	10	13113	495	1	11596	442
	968998	NEBRASKA	1	2	12220	3.6	438	1	21	12000	419	2	11516	430
		KANSAS	5	11	10986	3.4	375							
	979850	KANSAS	39	54	12479	3.8	471	14	16	12474	461	1	11726	447
	988706	KANSAS	5	5	13568	3.7	503	4	26	13088	489	1	12486	466
	991875	MISSOURI	1	1	12040	3.6	463	1	5	13900	534			
		NEBRASKA	1	1	12840	4.2	535	1	17	11700	422	1	10933	383
		KANSAS	125	164	12112	3.9	466	83	17	12145	457	1	11843	441
		TENNESSEE	1	1	10920	3.6	390							
		OKLAHOMA	1	1	12990	3.9	501	1	9	10060	377			
	997953	NEBRASKA	1	1	9270	3.4	313	1	37	11860	430	1	11957	428
		KANSAS	60	83	11885	3.6	429	35	16	12210	450	1	11633	439
	1018315	MICHIGAN	1	1	14930	3.3	488							
		KANSAS	50	54	11962	3.8	446	36	16	11298	424	1	11622	436
		TENNESSEE	1	1	11790	3.4	399							
	1024596	NEBRASKA	1	1	14360	4.0	571	1	36	14550	562	1	14868	561
		KANSAS	32	39	11574	4.2	488	21	15	12007	451	1	11620	432
	1025416	MISSOURI	26	82	14146	3.7	526							
		KANSAS	8	10	11163	4.1	449	6	30	11925	460	1	11787	451
	1036830	KANSAS	9	23	11979	3.5	424	2	18	12778	484	2	12406	447
	1049736	KANSAS	1	1	8590	3.5	304							
	1056655	MISSOURI	17	43	13081	3.7	483							
		KANSAS	67	86	11940	3.7	444	42	20	11654	431	1	11468	426
		MARYLAND	1	1	16900	3.7	624	1	137	12100	490	1	11510	463
	1063307	KANSAS	6	6	11235	3.8	429	5	11	12114	449	1	11639	428
	1063773	IOWA	2	4	13902	3.3	457	2	33	13690	519	2	11146	463
		KANSAS	24	43	12826	3.5	439	5	32	11997	469	1	11810	448
		OKLAHOMA	1	1	11460	4.0	455	1	1	12370	458	1	15445	530

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY DAUS.	CONTEMPORARY NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
JER.	1074403	NEBRASKA KANSAS NEW MEXICO	3 7 1	3 7 1	13060 12054 9110	3.8 3.8 3.6	498 462 333	3 7 1	32 20 2	14713 12111 10590	568 453 399	1 1 1	14868 11640	561 431
	1106455	NEBRASKA KANSAS	3 33	3 38	15237 12433	4.1 3.9	636 482	3 22	30 18	14530 12599	555 460	1 1	14392 12394	545 462
	1178343	KANSAS	2	2	10460	3.6	381	2	9	9690	369	1	12334	452
	448502	KANSAS	4	7	8210	5.1	419	1	10	7125	392	2	6887	351
	451141	OHIO INDIANA MICHIGAN MISSOURI KANSAS NORTH CAROLINA GEORGIA FLORIDA WASHINGTON	1 8 6 4 3 6 9 17 1	3 18 10 5 8 12 17 44 1	9480 9405 6736 7250 7542 7701 6677 8085 7660	5.6 5.8 5.9 5.2 5.9 5.2 5.3 5.1 6.1	533 542 395 379 445 400 346 413 469	1 5 4 4 3 5 2 6 1	14 5 17 15 19 21 65 44 6	8050 8242 8114 10290 7898 8254 5315 8185 11220	430 454 422 522 427 397 271 406 569	2 3 1 2 1 2 1 3 1	8224 8393 8587 8865 7830 7467 5690 7980 11380	437 452 442 413 417 369 283 396 574
	478638	MISSOURI KANSAS	4 2	4 4	7643 7016	5.5 5.6	422 386	1	3	8970	438	1	7794	393
	479370	KANSAS	5	9	6493	5.1	335							
	482787	KANSAS OKLAHOMA TEXAS	2 4 1	2 4 1	7870 7685 7740	4.6 5.4 5.3	356 410 411	1 2	1 19	6790 7645	320 405	1	6998	373
	485887	NEBRASKA KANSAS UTAH	1 16 1	1 28 3	7960 7286 7693	5.0 5.2 5.7	396 375 443	1 13 1	5 19 51	7980 7221 6455	405 379 347	1	7368	384
	490232	KANSAS	10	19	7299	5.1	366							
B.S.	493362	MISSOURI KANSAS OKLAHOMA	8 8 1	18 23 1	8823 7197 3550	5.1 5.1 5.8	443 368 207	4 2 1	4 24 8	8485 7205 3450	485 365 190	3 1	9363 7619	511 381
	500983	MINNESOTA	1	2	7960	4.8	380					1	11260	559
	509512	KANSAS	1	1	6800	5.7	390							
	510889	KANSAS	8	10	4770	5.1	250	2	2	6480	335	2	6314	327
	551267	KANSAS	1	1	7530	4.7	354							
	61700	KANSAS	3	5	8752	4.2	357							
	71724	KANSAS	19	29	9153	4.4	400	8	15	9719	408	1	10101	428
	72519	MISSOURI KANSAS	1 22	1 41	9250 9549	3.9 4.3	365 408	5	11	9677	412	2	9755	415
	75041	KANSAS KENTUCKY TEXAS	26 1 1	37 1 1	8888 8830 15000	4.1 4.4 3.6	362 386 539	6 1 1	13 37	9885 11180	400 435	1	9647	395
	77508	KANSAS	4	5	7133	4.9	346	3	14	9933	408	1	9652	407
	85035	KANSAS	3	3	11303	4.0	444							
	85182	KANSAS	6	11	10946	4.4	476							
	86059	KANSAS MARYLAND	28 1	47 1	10982 11380	4.2 4.9	466 556	7	13	10026	430	1 1	9765 8502	404 361
	86677	KANSAS	3	5	9988	4.3	425							
	90497	COLORADO	1	2	16750	3.6	608							
	91729	KANSAS	1	1	11440	4.1	468							
	92282	KANSAS MARYLAND	3 1	3 2	10373 12580	4.1 4.2	431 526	2	17	9260	356	1	8797	366
	93567	KANSAS	4	6	7900	4.5	344	3	16	10102	439	2	9233	388
	96217	KANSAS	4	5	10791	4.3	452	3	13	9628	407	2	10039	427
	114934	KANSAS MARYLAND	11 1	14 2	9662 9190	4.5 4.9	432 455	10	12	10799	449	1	10061	424

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				AV. YEARLY HERO			
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	
M. SH		2080	KANSAS	2	2	6475	4.1	262	1	9	7370	280	1	7401	278	
		10174	KANSAS	4	4	8333	3.8	312	3	8	7077	269	1	7459	284	
		52475	KANSAS	2	2	7395	3.7	270	1	8	8590	325	1	8971	334	
		63646	KANSAS	6	13	6595	4.0	262								
		66284	KANSAS	2	2	5445	4.1	221								
		68608	KANSAS	3	10	7965	3.8	305	1	2	8497	325	2	6391	265	
		69925	KANSAS	4	5	6906	4.2	293	3	8	7465	286	1	7901	298	
		86119	KANSAS	1	2	8885	3.4	302	1	1	7620	267	1	6780	275	
		95092	MINNESOTA	2	4	6519	4.1	269	2	11	7669	290	3	6801	258	
			KANSAS	9	16	7381	3.9	289	4	8	7844	304	1	7922	303	
	103107	KANSAS	3	7	9606	3.8	364	3	6	7610	297	2	8813	329		
	123324	KANSAS	1	1	7620	4.1	312	1	7	6740	277	1	8655	324		

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY DAUS.	CDTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
001 GUER	303068	PENNSYLVANIA	8	17	7448	4.7	343	3	9	8483	409	2	7881	390
		DELAWARE	24	72	7605	4.8	359	15	7	9280	415	2	8493	389
		MARYLAND	7	21	7331	4.8	351	1	7	8354	425	1	7597	373
		VIRGINIA	1	2	7460	4.4	328							
	313215	DELAWARE	10	33	6793	4.9	332	10	8	8008	369	3	7968	377
		MARYLAND	1	1	8290	4.4	368	1	2	6460	342			
	339966	PENNSYLVANIA	2	2	7705	4.9	377	2	21	8025	377	1	7717	368
		DELAWARE	72	191	7715	4.8	366	67	8	8265	375	2	8312	380
		MARYLAND	2	2	7450	5.1	380	1	31	7910	352	1	7467	312
	342092	DELAWARE	1	1	8100	4.6	375	1	2	14350	466	1	11946	469
	346892	PENNSYLVANIA	2	2	5470	4.8	263	2	11	7970	347	1	6834	331
		DELAWARE	46	102	7632	4.6	353	46	10	8684	391	2	8924	398
		MARYLAND	2	9	7484	4.2	314	2	12	7438	360	4	7661	369
	353113	PENNSYLVANIA	3	4	6578	4.5	297	1	4	8535	394			
		DELAWARE	12	28	6977	4.7	325	7	8	7804	360	2	7294	337
		MARYLAND	3	7	6568	5.0	329							
	353709	PENNSYLVANIA	8	13	7736	5.3	408	7	12	8981	438	1	9349	452
		DELAWARE	11	31	7267	4.7	341	7	12	7699	359	3	7926	364
		MARYLAND	1	2	8735	5.1	440	1	28	8250	357	1	7467	312
	374200	DELAWARE	1	4	8263	4.5	371							
	374289	PENNSYLVANIA	2	3	7020	5.2	364	2	4	9078	410	1	8524	427
		DELAWARE	41	85	7407	4.8	354	37	10	8760	386	2	8725	390
		MARYLAND	1	1	6640	5.3	353	1	2	7290	350			
	378538	PENNSYLVANIA	6	9	7756	4.8	374	6	12	9192	426	1	9375	450
		DELAWARE	4	5	6106	4.5	275	4	12	8626	416	1	8727	413
	398683	DELAWARE	2	2	7555	5.0	378	2	18	8000	409	1	7216	359
	412676	DELAWARE	6	7	7511	4.6	343	4	12	8835	416	1	8636	412
	440357	DELAWARE	3	7	7581	5.0	368	3	12	10538	451	2	9863	434
		MARYLAND	1	1	6280	5.3	331	1	2	7470	361			
	456901	DELAWARE	2	2	6755	5.2	353	2	11	9335	366	1	6682	329
	461871	DELAWARE	2	3	8148	4.7	381	2	13	7873	365	2	7309	327
		MARYLAND	1	2	10160	4.1	415	1	22	8400	392	1	8131	367
HOL.	911810	NEW JERSEY	1	1	10530	3.3	352							
		PENNSYLVANIA	6	12	9555	3.6	351	2	13	12154	467	4	14173	526
		MINNESOTA	1	1	13670	3.6	488							
		DELAWARE	86	202	10595	3.7	390	61	9	10967	429	2	10744	419
		MARYLAND	12	32	11373	3.6	408	7	10	11710	454	3	11472	430
		VIRGINIA	1	2	5255	3.4	182							
	929445	NEW YORK	1	1	15590	3.6	565							
		PENNSYLVANIA	3	10	11744	3.7	434	3	9	11987	424	4	11468	414
		DELAWARE	76	181	11952	3.6	436	64	11	11250	429	2	11645	443
		MARYLAND	7	19	12079	3.6	436	5	10	11529	419	3	11305	420
	967405	PENNSYLVANIA	1	2	14265	3.9	554	1	29	10905	465	2	11282	465
		DELAWARE	26	39	12332	3.9	479	23	16	12620	477	1	12936	490
	1024852	PENNSYLVANIA	1	2	10190	3.6	364	1	7	10095	413	2	10192	382
		DELAWARE	24	63	11954	3.6	428	24	11	11631	454	3	11392	440
		MARYLAND	1	1	7950	2.9	230	1	6	7210	283	1	9134	331
	1112084	PENNSYLVANIA	2	4	8488	3.9	334	2	12	9205	321	1	9549	329
		DELAWARE	59	125	10755	3.9	420	59	10	11244	438	2	10968	426
		MARYLAND	4	7	9961	3.7	373	4	4	10633	397	2	10777	402
		VIRGINIA	1	1	11310	4.3	489	1	19	12600	462	1	12546	466
	1125136	DELAWARE	19	39	10829	3.8	410	19	9	10907	427	2	10854	423
		MARYLAND	4	5	12385	4.1	508	4	7	10615	392	1	12156	492
JER.	426065	PENNSYLVANIA	8	21	6839	5.3	360	5	15	7758	425	3	8008	438
		DELAWARE	7	22	6411	5.5	348	3	11	7791	401	2	7371	384
		MARYLAND	7	25	6587	4.7	305	4	9	6540	347	3	5920	314
		TENNESSEE	1	1	7350	5.0	367							
		ALABAMA	1	2	7790	4.2	327							
	448737	NEW JERSEY	2	4	6937	4.8	332							
		PENNSYLVANIA	31	100	7032	5.1	355	20	9	6625	345	3	6946	362
		DELAWARE	33	130	6969	5.2	362	25	11	7019	366	3	7096	371
		MARYLAND	13	61	7299	5.2	379	4	13	7652	412	4	7547	397

TABLE 16.--DAUGHTER-AVERAGE DF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GRUPLD BY STUD,
BY SIRE, BY STATE IN WHICH RECDRS WERE MADE

STUD	BRED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LBS.	TEST PCT.	FAT LBS.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.				
									ND. DAUS.	RECORDS NO.	MILK LBS.	FAT LBS.	RECORDS NO.	MILK LBS.	FAT LBS.		
002	GUER	477748	GEORGIA	1	4	7985	4.6	369									
			ALABAMA	1	1	6180	4.2	263									
			NEW JERSEY	1	2	7020	4.9	347									
			PENNSYLVANIA	5	13	7327	5.1	371	4	10	7844	420	2	7630	416		
		479221	DELAWARE	5	17	8414	5.0	420	5	11	7248	381	2	7267	381		
			MARYLAND	1	2	8160	5.0	405									
			NEW JERSEY	1	1	6100	5.3	322									
			PENNSYLVANIA	6	23	7056	5.4	380	6	12	7687	410	3	7723	420		
		486928	DELAWARE	19	38	5573	5.1	286	14	13	6855	355	2	6757	351		
			MARYLAND	3	7	6197	4.7	289	2	13	7860	393	3	7547	387		
			PENNSYLVANIA	5	12	6474	5.6	358	4	9	8395	435	3	7909	426		
			DELAWARE	6	17	6357	5.4	342	6	13	7256	378	3	7646	406		
		504701	MARYLAND	1	4	8905	5.4	481	1	3	10057	492	2	9086	453		
			DELAWARE	1	2	7245	5.9	429	1	17	8615	472	2	8393	448		
			PENNSYLVANIA	1	1	9310	5.2	486	1	15	7820	417					
			DELAWARE	2	4	7574	5.7	434	1	10	6555	362	3	8898	487		
		HOL.	717608	PENNSYLVANIA	2	3	6363	4.4	284	1	8	5175	278				
				DELAWARE	2	7	7590	5.4	411								
PENNSYLVANIA	2			9	9926	4.7	462										
DELAWARE	6			21	8137	4.7	377										
374176	NEW JERSEY			2	4	7153	5.1	363									
	PENNSYLVANIA			11	27	7791	5.0	389	4	22	9105	405	1	8393	389		
	DELAWARE			6	11	7708	4.9	376									
	MARYLAND			3	12	7753	5.3	406									
376720	VIRGINIA			1	1	5100	5.2	266									
	DELAWARE			2	6	7642	5.2	394									
	PENNSYLVANIA	1	2	8410	5.0	421											
	DELAWARE	4	14	7195	5.1	360	2	5	9011	378	4	7750	386				
JER.	400105	MARYLAND	5	5	7742	4.7	369	1	56	9040	360	1	6954	318			
		DELAWARE	3	6	13303	3.5	466										
		MARYLAND	1	9	17073	3.4	580	1	8	14538	522	3	14755	541			
		742081	DELAWARE	4	12	12743	3.5	437	2	9	10575	423	2	8470	382		
			MARYLAND	2	16	10496	3.5	369	2	7	12457	449	4	11251	413		
		800000	VERMONT	1	2	5780	3.6	208									
			NEW YORK	1	3	14617	3.6	532									
			PENNSYLVANIA	2	2	8120	3.3	264	1	10	8330	360					
			WISCONSIN	3	12	11989	3.5	412	3	8	13240	462	1	13581	491		
			NEBRASKA	1	2	14360	3.9	555									
DELAWARE	5		18	12831	3.5	447	5	15	13917	494	2	13120	463				
HOL.	835914	MARYLAND	1	2	14230	3.5	486										
		PENNSYLVANIA	13	26	11757	3.6	418										
		DELAWARE	1	2	10430	3.9	402										
		MARYLAND	2	8	8129	3.6	291	1	10	12417	443	1	13113	447			
		894625	DELAWARE	3	7	11694	3.7	428									
			DELAWARE	7	21	12394	3.6	446	4	7	12103	459	4	13055	508		
			MARYLAND	6	28	11050	3.4	374	5	6	10576	390	2	9949	370		
			VIRGINIA	1	2	9980	3.3	330									
		914766	WEST VIRGINIA	1	1	8810	3.5	305									
			DELAWARE	7	14	8103	5.0	405									
MARYLAND	1		2	6565	5.0	328											
PENNSYLVANIA	3		6	7262	5.1	368	1	10	7370	387	1	7630	408				
JER.	428620	DELAWARE	1	1	6290	5.2	326										

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTLMPORARY NO.	AV. MILK LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
001	AYR.	59515	MAINE	1	1	8300	3.7	305						
			NEW YORK	1	3	7673	4.0	307						
			NEW JERSEY	1	1	4280	4.5	192						
			PENNSYLVANIA	61	199	9018	4.2	376	53	15	9046	359	3	9728 389
			ILLINOIS	1	1	9880	4.2	419	1	8	10880	470		
			DELAWARE	1	3	6057	4.3	260	1	19	7173	270	2	7778 306
			MARYLAND	39	126	8867	4.1	361	21	13	9232	377	2	9167 375
			NORTH CAROLINA	4	12	8473	4.1	348	1	7	8775	398	1	9941 391
		64671	MARYLAND	16	53	8570	4.3	367	8	12	9091	363	3	8885 350
		66820	PENNSYLVANIA	1	1	8790	4.5	398						
			MARYLAND	18	51	9022	4.3	389	12	16	10205	414	2	9776 400
			VIRGINIA	1	1	7690	4.1	313						
		69424	MARYLAND	6	22	9912	4.0	389	4	22	9973	394	4	10345 409
			NORTH CAROLINA	4	16	7130	3.9	278	1	6	10110	405	3	8193 330
		70288	PENNSYLVANIA	4	13	9401	4.1	380	2	5	7359	304	2	8657 348
			MARYLAND	42	114	8440	4.1	347	30	16	9100	371	2	9093 369
			VIRGINIA	1	1	6820	4.1	278						
			WEST VIRGINIA	2	2	10020	4.2	418						
			NORTH CAROLINA	1	1	11050	3.8	422	1	6	9840	344	1	9766 355
		72257	NEW YORK	1	2	8285	3.6	298						
			PENNSYLVANIA	5	8	10158	4.0	414	5	4	8564	364	2	11614 490
			DELAWARE	4	8	9151	4.0	362	4	12	9976	413	2	9647 388
			MARYLAND	50	88	8136	4.1	328	42	16	8987	367	2	8847 354
			VIRGINIA	1	1	4230	3.9	167						
		72541	NEW YORK	1	1	9040	3.2	288						
			PENNSYLVANIA	1	2	12310	4.5	550	1	6	11930	535	2	12328 534
			DELAWARE	2	6	10383	4.0	415	1	15	9186	384	5	10048 419
			MARYLAND	32	61	7932	4.1	325	30	15	8793	358	2	8637 347
			VIRGINIA	2	2	7235	3.6	265	1	24	9760	404		
		75581	MARYLAND	2	8	9718	4.4	421	2	13	9699	390	6	8780 354
		75815	PENNSYLVANIA	4	9	8861	4.2	368	4	7	11283	459	2	11572 492
			MARYLAND	44	104	8364	4.2	353	39	15	8788	357	2	9168 368
			VIRGINIA	3	7	5452	4.3	232						
			NORTH CAROLINA	2	2	5025	4.1	204						
		76572	NEW JERSEY	1	3	8693	4.0	349						
			PENNSYLVANIA	10	18	8169	4.0	322	6	5	8196	319	1	9810 392
			DELAWARE	2	5	8234	3.9	321	2	16	8294	343	3	8312 320
			MARYLAND	77	204	8235	3.9	323	51	12	9165	370	2	9121 365
			VIRGINIA	2	2	6770	3.6	245	1	34	9740	377	1	9505 380
			NORTH CAROLINA	1	2	9965	3.6	352	1	5	9880	364	2	8998 348
		77130	PENNSYLVANIA	11	17	8215	4.1	344	5	5	8387	344	2	9975 397
			DELAWARE	2	4	9144	4.3	386	1	11	8870	351	2	10246 413
			MARYLAND	35	94	8016	4.2	332	30	12	8633	354	2	8571 351
			VIRGINIA	1	2	6690	3.8	255						
			NORTH CAROLINA	1	2	10635	3.9	417	1	4	8690	329	2	8998 348
		83172	PENNSYLVANIA	3	6	11722	4.5	528	3	5	11598	495	2	12075 523
			DELAWARE	1	1	7390	4.0	293	1	12	9370	368	1	9799 389
			MARYLAND	21	26	8287	4.3	356	20	19	9700	404	1	9555 398
			VIRGINIA	2	2	9305	4.4	411	2	8	13655	545	1	9554 398
		88679	CONNECTICUT	1	1	6150	4.5	276						
			NEW JERSEY	1	1	6856	4.1	280						
			PENNSYLVANIA	4	12	7791	4.4	342	4	9	9246	366	2	9511 381
			DELAWARE	3	3	7123	4.2	295	3	21	10313	430	1	9480 394
			MARYLAND	7	19	6790	4.2	279	7	24	8661	359	3	8838 363
		90425	PENNSYLVANIA	2	3	5173	4.5	227	2	4	6443	249	1	9293 388
			DELAWARE	2	2	7995	4.4	345	2	14	9865	428	1	7674 338
			MARYLAND	28	49	9128	4.1	374	26	14	8424	342	2	9044 363
			NORTH CAROLINA	1	1	10480	4.0	416	1	26	9460	342		
		90536	PENNSYLVANIA	5	21	9678	4.4	429	5	6	10365	435	3	10288 422
			DELAWARE	1	3	12130	3.8	461	1	11	9425	365	2	10159 395
			MARYLAND	41	53	8838	4.3	377	38	14	9627	387	1	9949 410
GULR		236474	ILLINOIS	1	2	4795	4.7	231						
			MARYLAND	4	11	7558	4.7	353	2	13	8948	401	2	9606 430
			NORTH CAROLINA	1	1	6140	4.8	295						
		276386	PENNSYLVANIA	1	3	9820	4.4	431	1	18	8077	393	1	8916 425
			MARYLAND	17	50	7577	4.9	370	13	10	8780	409	2	8907 423

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAS.	CONTEMPORARY RECORDS NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
	289164	NEW JERSEY MARYLAND	1 6	1 10	8070 6451	5.3 5.1	430 327							
	289762	PENNSYLVANIA MARYLAND VIRGINIA	7 164 2	20 412 6	7723 8185 8304	4.7 4.8 4.9	373 390 406	2 6 125	10 12 15	7248 8029 8885	337 376 397	2 2 2	11385 8885 8874	414 422 398
	290352	MARYLAND NORTH CAROLINA	7 1	17 2	7290 9900	4.8 4.3	346 422	3	13	8129	379	2	8606	407
	290649	PENNSYLVANIA MARYLAND	1 16	4 62	11298 8652	4.4 5.0	499 431	1 7	8 19	8275 8973	378 427	4 4	8227 9210	382 434
	291223	PENNSYLVANIA DELAWARE MARYLAND	5 1 43	11 1 97	7332 6320 7184	5.1 5.5 5.2	378 345 369	4 1 36	9 15 15	9148 8520 8575	392 429 395	1 1 2	9403 8033 8807	399 411 408
	291724	MARYLAND	6	19	7726	5.0	387	5	9	8870	399	2	8728	405
	312528	MARYLAND	10	30	8107	4.7	375	3	13	8531	405	3	8824	412
	323661	PENNSYLVANIA MICHIGAN MARYLAND	3 1 63	7 5 122	7563 8000 7770	4.8 4.6 4.8	364 365 374	3 1 60	15 7 14	10358 8168 8292	417 392 384	1 5 2	9339 9335 8525	405 453 393
	330448	PENNSYLVANIA MARYLAND VIRGINIA	1 24 1	1 71 1	7220 7938 10770	5.4 5.1 4.8	391 401 519	16	13	9114	405	3	8805	398
	335215	PENNSYLVANIA DELAWARE MARYLAND VIRGINIA NORTH CAROLINA FLORIDA	2 1 141 3 1 1	3 5 294 6 3 5	7768 6432 7638 8221 6813 9980	5.1 5.3 5.1 5.1 4.8 4.4	394 345 384 413 325 443	2 1 115	18 13 13	6405 7232 8780	300 364 398	5 2	7301 8674	377 399
	337136	PENNSYLVANIA MARYLAND	3 17	15 74	8801 10032	4.4 4.5	386 451	2 11	10 7	7296 10421	357 469	3 2	7138 9819	351 440
	337584	MARYLAND	9	28	7366	5.0	365	5	11	8930	401	4	8634	404
	342718	CONNECTICUT NEW JERSEY MARYLAND VIRGINIA	2 1 13 5	3 1 40 7	8000 8700 7342 6979	4.9 4.9 4.8 4.8	389 427 348 338	1 1 7	4 8 9	10865 7700 8346	416 375 390	2 3	9162 8263	381 385
	346052	PENNSYLVANIA MARYLAND	2 14	15 41	8120 8163	4.9 4.7	401 379	2 4	15 12	8544 10196	414 425	5 2	8946 9983	437 412
	347034	MARYLAND	10	34	7210	5.1	365	7	13	8690	396	3	8639	398
	347969	MARYLAND	8	17	8476	5.0	418	7	11	8283	374	2	9050	401
	353834	PENNSYLVANIA MICHIGAN MARYLAND VIRGINIA FLORIDA	3 1 53 5 2	7 3 116 7 6	8573 7473 8004 8775 6676	5.4 4.9 5.3 5.3 4.3	462 368 420 463 286	3 1 39 1 2	7 7 16 1 103	8688 7480 8795 7770 8121	423 365 413 371 381	2 3 2 2	9159 9101 8967 7347	443 449 420 351
	355674	MARYLAND	2	4	8160	4.9	391							
	361161	MARYLAND VIRGINIA	32 4	81 9	7360 8589	4.9 4.7	363 406	17 1	15 19	8760 8650	398 329	3 1	8959 9570	407 354
	364453	ILLINOIS MARYLAND VIRGINIA	1 15 1	2 48 2	6800 6999 8165	4.8 4.9 4.9	326 338 396	10	9	8672	381	3	8986	395
	368541	MARYLAND	3	10	8831	4.9	427	2	7	7514	384	2	7781	392
	370115	MARYLAND WEST VIRGINIA	1 4	1 5	9340 7769	4.3 5.1	404 392	1 4	1 18	6780 9815	301 386	1 1	6268 10116	313 413
	371893	DELAWARE MARYLAND	1 16	2 31	7440 7696	4.6 4.9	342 378	1 12	103 12	8770 9227	425 437	2	8915	431
	374914	MARYLAND	1	2	7355	4.8	351							
	379664	MARYLAND	7	35	7497	4.9	367	5	16	8504	420	4	8349	405
	390328	MARYLAND VIRGINIA WEST VIRGINIA	28 1 1	77 4 3	8204 8543 8453	4.8 5.0 5.8	391 422 487	18	8	8195	380	3	8096	375

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV. FAT LB.	YEARLY HERD			AV. FAT LB.
								DAUS. NO.	RECORDS NO.	MILK LB.		RECORDS NO.	MILK LB.	FAT LB.	
	393236	PENNSYLVANIA	2	2	6530	5.0	333	1	4	10020	439				
		MARYLAND	95	198	7770	4.7	365	85	13	8870	402	2	9020	410	
		VIRGINIA	3	3	8063	4.7	377	2	36	8925	411	1	9276	392	
	396995	PENNSYLVANIA	1	1	7410	5.0	368	1	11	6870	344	1	7597	374	
		MICHIGAN	1	2	5190	5.4	280	1	6	8395	423	2	9614	466	
		MARYLAND	20	38	6793	5.2	352	19	12	8584	387	2	8870	404	
	407884	MARYLAND	1	1	6350	4.6	293	1	39	8090	401	1	8666	425	
	412932	MARYLAND	9	16	8115	5.1	410	5	8	9710	421	2	9737	401	
		VIRGINIA	1	2	7945	4.8	381								
	430147	MARYLAND	7	16	7426	4.9	356	4	10	8380	347	2	8834	389	
	431319	MARYLAND	1	1	8130	5.0	404								
	435604	MARYLAND	1	1	7910	5.4	427	1	55	8380	414	1	8415	404	
	447282	MARYLAND	33	57	7190	4.8	343	30	16	8391	392	2	8586	401	
		VIRGINIA	2	2	6240	4.9	303								
HOL.	769577	NEW YORK	1	4	14403	3.7	537								
		PENNSYLVANIA	1	4	11840	3.6	420	1	19	10848	395	1	11532	431	
		MARYLAND	13	64	12742	3.6	464	10	12	12266	457	4	12018	450	
	773953	PENNSYLVANIA	1	3	12940	4.1	529	1	16	12165	445	2	12263	461	
		OHIO	1	1	10210	3.5	356	1	3	13060	528				
		DELAWARE	2	6	9216	3.5	325	2	6	9454	358	4	10219	367	
		MARYLAND	432	1109	10850	3.9	425	326	15	10871	412	2	10754	411	
		VIRGINIA	41	100	11147	3.8	425	7	16	12991	495	2	12394	479	
		GEORGIA	1	3	7147	3.5	249								
	778559	MARYLAND	5	28	10959	3.6	395								
	804949	VIRGINIA	1	1	18740	4.0	740	1	24	12630	498	1	13135	508	
	830592	MARYLAND	2	4	10505	3.4	354	1	10	7120	323	1	6769	319	
	845905	MARYLAND	10	36	12185	3.5	429	7	13	11574	416	3	11439	418	
	849969	NEW YORK	1	1	14700	3.7	547								
		DELAWARE	1	4	11920	3.6	423								
		MARYLAND	28	109	10950	3.7	401	11	16	12081	450	4	12150	454	
		VIRGINIA	3	5	10038	3.6	359	1	4	9980	400				
	849972	PENNSYLVANIA	15	36	9414	3.8	354	15	6	11216	409	2	10797	393	
		DELAWARE	1	3	10347	3.5	363	1	17	10360	383	3	10497	373	
		MARYLAND	17	51	10800	3.6	385	13	12	11114	409	2	11084	408	
	854668	PENNSYLVANIA	2	6	10715	3.5	372	2	11	11740	441	2	11658	448	
		DELAWARE	1	1	13560	3.8	520	1	6	9290	357	1	9483	376	
		MARYLAND	152	309	11343	3.9	445	127	15	11371	428	2	11459	437	
		VIRGINIA	19	35	11212	3.9	439	1	23	15040	568	1	13058	488	
	856246	MARYLAND	14	52	11132	3.8	417	4	11	13330	499	4	13129	488	
		VIRGINIA	3	5	14408	3.7	525	1	6	13740	510	2	13898	507	
	869394	NEW YORK	1	1	7380	3.4	249	1	33	14460	548	1	15511	596	
		PENNSYLVANIA	1	1	14790	3.8	567	1	7	12420	414	1	13353	468	
		DELAWARE	1	2	8165	3.6	292								
		MARYLAND	43	127	11654	3.9	446	33	15	12582	476	2	12419	466	
	874187	NEW YORK	1	1	11980	3.7	440								
		PENNSYLVANIA	1	1	12590	3.1	385	1	31	11480	378	1	11009	372	
		MARYLAND	123	418	11571	3.6	417	81	13	11153	419	3	11007	417	
		VIRGINIA	17	58	11952	3.6	435	3	13	11466	430	2	11468	430	
		NORTH CAROLINA	1	6	14002	3.5	483	1	12	12520	444	3	12339	436	
	889022	PENNSYLVANIA	2	2	10815	3.4	363								
		MARYLAND	29	95	10550	3.8	395	23	16	10832	403	2	10405	387	
	905624	MARYLAND	50	159	11068	3.8	420	36	10	11022	413	2	10886	408	
		VIRGINIA	1	5	9672	3.3	315								
		WEST VIRGINIA	1	1	9350	3.8	356	1	1	10230	368				
	909077	PENNSYLVANIA	1	4	11685	3.7	437	1	7	12538	461	3	11547	436	
		MARYLAND	184	412	11311	3.8	425	159	16	10614	409	2	10595	411	
		VIRGINIA	26	63	11541	3.8	443	3	19	13098	493	1	12502	457	
		WEST VIRGINIA	1	1	9240	3.8	350	1	23	14380	509	1	14072	519	
		NORTH CAROLINA	2	4	11975	4.1	493	2	17	11107	421	2	11106	424	
	918756	PENNSYLVANIA	1	2	13480	3.5	465	1	26	11875	506	2	11723	488	
		MARYLAND	30	70	10495	3.7	383	12	20	11438	433	2	11289	429	
		VIRGINIA	1	3	11623	4.1	479								

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREEO	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				AV. YEARLY HERD			AV. FAT LB.
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	
	921426	PENNSYLVANIA	2	5	13799	3.7	509	1	4	11450	455	1	11707	422	
		MARYLAND	73	237	11838	3.7	438	59	10	11086	417	2	10785	408	
		VIRGINIA	3	11	11689	3.6	422								
		WEST VIRGINIA	2	2	9115	3.7	326								
	931840	NEW JERSEY	2	2	15085	3.9	587								
		DELAWARE	10	21	12456	3.6	442	10	10	12891	480	2	12966	479	
		MARYLAND	315	737	11351	3.6	410	245	14	11055	422	2	11023	422	
		VIRGINIA	30	62	11793	3.7	428	7	17	12781	470	2	11360	420	
	960618	PENNSYLVANIA	2	4	13002	3.6	461	2	24	10497	383	2	11316	415	
		MARYLAND	68	114	11577	3.8	438	63	20	11113	417	2	10827	413	
		VIRGINIA	5	7	10764	4.1	424	1	31	8680	345	1	9320	349	
	966311	OHIO	1	2	13220	3.7	480	1	3	13170	452				
		MARYLAND	39	76	10768	3.6	391	32	23	10972	411	1	10832	412	
		VIRGINIA	1	1	10300	3.1	319								
	967010	NEW YORK	8	10	12586	3.9	488	7	23	13961	515	1	14646	547	
		PENNSYLVANIA	16	19	10994	3.8	416	16	19	11790	439	1	12715	469	
		MINNESOTA	1	1	11260	4.2	475								
		DELAWARE	5	7	12131	3.7	439	5	8	12334	448	2	13465	486	
		MARYLAND	609	700	11034	3.8	423	553	19	12104	454	1	12374	464	
		VIRGINIA	47	51	10920	3.8	413	39	38	12450	481	1	11528	435	
		WEST VIRGINIA	4	6	12438	3.9	480	4	25	12286	436	1	12148	439	
		NORTH CAROLINA	8	8	9815	4.0	388	7	33	10534	400	1	11135	423	
		GEORGIA	1	1	11600	4.0	468	1	26	12930	518	1	10246	389	
	969842	NEW YORK	1	1	15610	3.5	547	1	30	14920	543	1	14671	548	
		MARYLAND	54	172	11596	3.7	428	48	17	11153	422	3	10988	422	
		VIRGINIA	1	2	14210	3.6	501								
		WEST VIRGINIA	1	1	6110	3.8	232								
	997612	MARYLAND	4	4	10330	3.6	367	4	9	10008	456	1	11314	452	
		WEST VIRGINIA	2	2	10955	3.5	376	1	1	12340	385	1	15118	574	
	1001670	MARYLAND	19	36	11533	3.9	441	14	22	11418	423	1	11658	433	
		NORTH CAROLINA	1	1	6270	4.0	251	1	16	10290	372	1	12633	467	
	1003835	PENNSYLVANIA	1	1	17090	3.9	672	1	22	14770	581	1	13908	552	
		MARYLAND	64	113	11172	3.8	418	58	21	11202	420	2	11145	419	
		VIRGINIA	1	3	15623	3.9	613	1	4	12887	481	1	11478	480	
		WEST VIRGINIA	1	2	12160	3.7	449								
	1025902	VERMONT	1	1	8690	3.7	324								
		NEW YORK	1	1	14050	3.3	466	1	30	14970	546	1	14791	553	
		PENNSYLVANIA	1	1	15390	3.4	521	1	6	14630	557				
		DELAWARE	1	1	14550	3.6	528	1	11	12790	453	1	13494	491	
		MARYLAND	213	282	12492	3.7	460	197	21	12209	458	1	12412	466	
		VIRGINIA	13	14	12008	3.8	452	11	32	11487	432	1	11595	438	
		WEST VIRGINIA	1	1	14310	3.8	545								
		NORTH CAROLINA	2	2	9910	3.4	331	2	76	9980	332	1	10987	352	
		GEORGIA	1	1	8720	3.6	315	1	16	8770	307	1	7913	273	
	1043768	PENNSYLVANIA	2	2	11320	3.7	421	2	18	10830	432	1	11260	433	
		MARYLAND	63	78	11974	3.9	464	61	17	12151	452	1	12557	471	
		VIRGINIA	6	6	14502	3.8	558	6	37	12542	492	1	11452	435	
	1048984	DELAWARE	3	9	11188	3.3	376	3	10	11698	432	2	10560	419	
		MARYLAND	112	249	10815	3.7	400	100	15	11512	436	2	11371	434	
		VIRGINIA	3	5	10069	3.5	359	1	13	14277	536	3	14017	509	
		NORTH CAROLINA	2	5	11883	3.6	431	2	12	10897	409	3	11081	418	
	1122127	PENNSYLVANIA	1	1	12110	3.7	453	1	7	11700	432				
		MARYLAND	26	26	14017	3.5	490	25	17	11768	441	1	12400	469	
		VIRGINIA	2	2	10345	4.5	451	2	32	10905	432	1	11794	451	
		NORTH CAROLINA	1	1	14710	3.6	533	1	23	12400	453	1	13069	487	
	1214569	PENNSYLVANIA	3	3	10167	3.8	382	3	20	10543	400	1	12350	470	
		MARYLAND	16	26	12340	3.8	468	15	24	12336	470	2	12437	474	
JER.	390864	PENNSYLVANIA	4	11	9151	5.3	484	3	19	8655	450	4	8880	467	
		MARYLAND	80	214	7428	5.3	388	21	11	7567	389	3	8015	414	
		VIRGINIA	5	15	6680	5.8	387								
	404147	MARYLAND	2	9	6590	5.3	352	2	3	8128	418	2	7167	376	
	406311	PENNSYLVANIA	1	6	7657	5.4	415								
		MARYLAND	12	28	6844	5.0	339	2	9	8050	431	1	9320	479	
	430784	MARYLAND	2	9	6780	5.0	339	1	2	6840	368	1	8219	416	
	432904	MARYLAND	7	11	8327	4.6	380	4	10	7779	334	2	7910	388	

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY RECORDS NO.	AV. MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
	436776	PENNSYLVANIA	1	6	7603	4.9	375							
		MARYLAND	39	95	6878	5.3	361	18	11	7556	386	2	7644	396
		VIRGINIA	1	4	5798	6.0	347							
	439545	PENNSYLVANIA	4	11	8322	5.5	458	4	25	9549	482	3	9236	465
		DELAWARE	4	16	7058	5.0	346	3	7	6758	369	3	6858	344
		MARYLAND	33	103	7426	5.2	385	15	12	7634	393	3	7760	401
	448498	PENNSYLVANIA	1	2	7750	4.6	358							
		MARYLAND	15	28	9113	4.7	424	4	16	9035	432	1	8036	383
	455496	DELAWARE	1	1	4130	4.7	196							
		MARYLAND	7	12	6900	4.8	330	5	10	6747	343	2	7607	391
	457456	PENNSYLVANIA	5	8	8375	5.2	438	4	22	8388	437	2	8692	458
		MARYLAND	16	43	7833	5.1	402	8	14	7520	387	2	7705	399
		VIRGINIA	1	1	5820	4.2	242							
	463580	PENNSYLVANIA	2	4	7779	5.6	432	2	7	8124	374	1	7957	390
		DELAWARE	1	2	6715	5.3	353	1	9	7265	361	1	6213	314
		MARYLAND	11	30	7113	5.5	390	5	14	6712	347	2	6770	349
	473440	MARYLAND	4	8	6303	5.3	332	4	10	7089	353	2	7486	370
	474056	MARYLAND	3	13	8733	5.0	416	2	8	7725	418	4	8009	427
	480768	MARYLAND	10	29	7580	5.2	356	3	11	9287	481	3	9127	468
	530060	MARYLAND	1	1	7100	5.1	359					1	9679	501
	554291	MAINE	33	52	8405	5.4	437	23	23	8588	443	2	8879	460
		NEW YORK	1	3	10003	5.2	518	1	332	8440	450	2	8328	441
		NEW JERSEY	1	2	10500	5.3	552	1	20	9420	510	1	8469	445
		PENNSYLVANIA	14	21	8029	5.1	409	9	17	8418	436	1	8562	442
		IOWA	1	1	6320	4.7	298	1	9	7540	396	1	8022	449
		DELAWARE	5	9	7441	5.2	383	5	27	8624	436	2	8734	441
		MARYLAND	61	80	6796	5.3	358	37	19	7444	379	1	7781	400
		VIRGINIA	2	2	4450	5.7	251							
		FLORIDA	1	1	9720	6.0	537	1	41	9180	502	1	7695	412
B.S.	68977	PENNSYLVANIA	1	1	17250	3.8	651							
		DELAWARE	5	9	8544	4.5	384							
		MARYLAND	14	26	7792	4.4	340	4	17	9174	366	2	9467	374
		VIRGINIA	1	1	6390	4.2	268							
	84179	MARYLAND	12	24	10416	4.1	421	2	12	10085	386	1	10502	419
	87957	MARYLAND	7	13	8635	4.3	366					2	11132	464
	92075	MARYLAND	4	7	10457	4.1	423	1	7	10170	425	2	10720	432
	94394	PENNSYLVANIA	3	5	8188	4.4	365	3	12	10435	456	1	8636	382
		MARYLAND	1	1	14470	4.2	612							
	113170	MARYLAND	1	1	12380	4.7	576	1	6	11800	529			
		VIRGINIA	2	2	10295	5.0	505	2	23	10335	390	1	9249	370
		WEST VIRGINIA	2	3	2346	4.9	115	2	18	5325	228			
002 AYR.	79374	NEW HAMPSHIRE	1	1	10850	4.4	475	1	8	7690	323	1	8088	357
		MASSACHUSETTS	1	1	17160	4.4	753	1	39	12980	534	1	11936	497
		NEW YORK	1	1	12810	3.7	479	1	21	11150	443	1	10791	427
		PENNSYLVANIA	2	2	14375	4.3	615	2	9	11540	499	1	11129	489
		OHIO	1	1	10380	4.1	423	1	32	8890	362			
		ILLINOIS	1	1	12230	4.8	583	1	26	9240	382	1	9309	396
		MICHIGAN	1	1	12570	4.5	564	1	32	12560	561	1	11848	523
		MARYLAND	42	44	10742	4.1	446	42	21	9919	412	1	10168	427
		VIRGINIA	3	3	15130	4.2	614	3	19	9580	383	1	9330	399
		NORTH CAROLINA	2	2	5635	3.5	196	2	8	7610	291			
	91654	WEST VIRGINIA	5	5	8792	4.0	343	4	27	8813	358	1	8758	360
		NORTH CAROLINA	1	1	7550	3.8	289	1	9	7170	270			
	92562	WEST VIRGINIA	8	12	10331	3.9	405	4	38	9625	399	1	9890	398
	94013	WEST VIRGINIA	8	11	9618	4.1	389	4	20	9919	402	2	9985	404
		NORTH CAROLINA	1	1	9060	3.6	329	1	36	7630	296	1	8546	329
		SOUTH CAROLINA	2	3	7348	4.3	309							
	98437	MARYLAND	6	7	10069	4.3	432	6	18	9496	373	1	10800	428
		VIRGINIA	1	1	5060	5.0	253	1	47	7950	321	1	6573	277
	111921	MARYLAND	16	17	7651	4.2	321	16	12	9040	375	1	9554	396
GUER	366202	OHIO	1	1	7480	5.0	377							
		MARYLAND	2	3	7085	5.2	366	2	4	7975	369	2	8127	397

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				AV. RECORDS NO.	YEARLY HERD			AV. FAT LB.
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.		RECORDS NO.	MILK LB.	FAT LB.	
		WEST VIRGINIA	15	28	7743	5.0	381	2	7	6620	309		1	7861	355	
	378160	WEST VIRGINIA	12	35	7521	4.8	363	1	13	8380	359		1	9232	391	
	391988	PENNSYLVANIA	11	14	6735	5.1	344	11	16	9100	390		1	10089	442	
		MICHIGAN	2	2	8300	5.0	415	2	8	8740	391		1	9112	422	
		MARYLAND	24	28	7787	5.0	389	23	17	9033	407		1	9677	439	
		VIRGINIA	2	2	9555	4.8	456	2	41	10280	413		1	10513	412	
	415353	NEW YORK	1	1	7330	4.8	352	1	65	8150	392		1	8328	401	
		NEW JERSEY	8	41	8159	4.9	399	2	6	8978	424		3	8495	413	
HDL.	874306	MARYLAND	1208	2418	11819	3.7	432	1116	18	11502	434		2	11606	440	
		VIRGINIA	51	65	11485	3.7	419	31	24	12172	462		1	12227	460	
		WEST VIRGINIA	3	7	11142	3.5	395	3	3	11597	407		2	10938	403	
		NORTH CAROLINA	6	10	12108	3.8	461	6	25	11272	425		2	10902	406	
		GEORGIA	4	7	10896	3.1	341	2	23	10268	394		2	9050	331	
		FLORIDA	1	1	6450	3.5	226	1	15	6330	240					
	978751	NEW YORK	2	4	12498	4.2	518	2	25	12795	466		2	12517	458	
		PENNSYLVANIA	8	18	10522	3.8	407	8	10	11178	426		2	11943	459	
		DELAWARE	6	8	10814	4.0	422	4	11	12400	444		1	11638	420	
		MARYLAND	324	546	11173	3.9	430	313	20	12061	449		2	12253	458	
		VIRGINIA	11	15	11605	4.0	462	9	27	11966	449		1	11635	435	
		WEST VIRGINIA	1	1	6620	4.3	284									
		NORTH CAROLINA	5	6	9004	4.3	383	5	28	10930	422		1	11655	441	
		FLORIDA	1	1	8670	3.5	303	1	34	7240	303					
	1024856	PENNSYLVANIA	1	1	15500	3.6	559	1	6	14610	551					
		MARYLAND	76	78	13688	4.0	544	75	24	12994	502		1	12456	479	
		VIRGINIA	1	1	15010	4.1	618	1	23	12430	494		1	11674	487	
	1034452	PENNSYLVANIA	1	1	8190	3.6	296	1	6	9220	365		1	9919	377	
		OHIO	1	1	14480	3.7	534	1	3	11630	468					
		MARYLAND	253	399	11406	3.7	415	236	19	11478	430		2	11584	436	
		VIRGINIA	12	15	10017	3.6	357	6	14	11197	412		1	11611	433	
		WEST VIRGINIA	1	1	6930	3.7	256	1	7	6630	274		1	9014	326	
	1073035	WEST VIRGINIA	2	3	14245	3.9	542	2	7	14190	515		2	11783	446	
	1092741	PENNSYLVANIA	1	1	19750	3.5	697	1	3	11090	396					
		MARYLAND	17	17	13765	3.7	507	16	16	12129	460		1	12512	464	
		VIRGINIA	1	1	11050	3.5	392	1	86	9390	338		1	10649	395	
	1108322	WEST VIRGINIA	52	56	10956	3.6	397	47	16	11579	427		1	11408	423	
	1109075	PENNSYLVANIA	152	277	11251	3.6	409	150	14	11796	434		2	11771	437	
		WEST VIRGINIA	2	2	12355	3.5	425	2	24	11615	430		1	11549	415	
	1109516	MARYLAND	1	1	14040	3.4	474									
	1111030	INDIANA	1	1	13100	4.2	545									
		WEST VIRGINIA	21	27	11631	3.8	434	12	15	11963	428		1	11703	423	
	1115687	NEW YORK	1	1	12490	3.9	491	1	14	17370	621		1	10955	419	
		PENNSYLVANIA	4	6	10748	3.9	411	4	18	11350	428		2	13219	486	
		MINNESOTA	1	1	12900	3.6	469									
		MARYLAND	85	141	11097	3.8	417	84	25	11246	423		2	11380	429	
		VIRGINIA	5	9	12742	3.5	439	3	17	12802	470		1	11020	415	
	1117039	MARYLAND	3	3	7930	3.4	251	1	1	10570	365		1	13581	488	
	1129792	PENNSYLVANIA	1	1	14550	4.0	586	1	6	14170	492					
		MARYLAND	42	61	12036	3.7	444	32	26	11390	425		1	11396	427	
		VIRGINIA	2	2	11520	3.7	427	1	16	9940	370		1	10063	378	
	1151349	NEW YORK	2	3	11475	3.7	422	2	33	13680	504		2	13628	500	
		NEW JERSEY	1	1	25000	4.9	1000	1	39	16480	669		1	16786	671	
		PENNSYLVANIA	13	15	12170	4.1	494	12	9	12915	481		1	12438	480	
		DELAWARE	4	6	13018	3.9	493	4	14	11688	436		2	11869	447	
		MARYLAND	267	369	11875	4.0	471	247	16	12013	453		1	12349	470	
		VIRGINIA	19	26	11959	3.9	458	16	40	12042	454		1	12474	470	
		NORTH CAROLINA	1	1	8640	4.7	405	1	25	10900	378					
	1200723	MARYLAND	1	1	15260	3.8	578	1	33	11320	410		1	12241	446	
		WEST VIRGINIA	14	15	11273	3.8	421	10	12	11268	416		1	11876	444	
	1204451	MARYLAND	12	12	10783	3.5	379	12	20	11682	433		1	12150	451	
	1241276	WEST VIRGINIA	13	14	12301	3.6	441	13	27	10738	395		1	10612	393	
	1286843	WEST VIRGINIA	1	1	8530	4.0	343	1	16	9360	364		1	9025	325	
JER.	453139	PENNSYLVANIA	4	6	6968	5.7	397	4	20	8050	433		1	8644	455	
		MARYLAND	20	31	8661	5.0	432	12	17	8595	423		1	8658	429	

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUP 10 BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE ND.	RECORDS FROM STATE VIRGINIA	DAUGHTERS NO. 1	RECORDS ND. 1	MILK LB. 8660	TEST PCT. 6.5	FAT LB. 561	305-DAY CDTEMPORARY AV.				YEARLY HERD AV.		
								NO. DAUS. 1	RECORDS NO. 1	MILK LB. 11330	FAT LB. 600	NO. 1	MILK LB. 8077	FAT LB. 421
	476084	DHID WEST VIRGINIA	1 10	1 15	4950 7214	5.3 4.8	263 344							
	489295	KANSAS MARYLAND WEST VIRGINIA	1 36 1	1 43 1	10490 8017 3880	5.9 5.1 4.4	616 401 170	1 26 1	1 24 2	10120 8339 3500	512 428 174	1 1 1	9200 8759	491 452
	490967	PENNSYLVANIA DELAWARE MARYLAND	1 2 23	1 4 51	3050 7128 7917	4.5 5.8 5.1	138 410 398							
	538703	WEST VIRGINIA	7	13	6961	4.8	336	7	19	6995	363	1	7323	379
	559189	WEST VIRGINIA	6	7	7298	5.2	379	5	30	6456	317	1	7515	367
	559354	MARYLAND	21	30	7752	5.1	396	13	16	7748	407	2	8243	436
	563278	WEST VIRGINIA	3	5	7332	5.3	392	3	18	6827	377	1	6703	365
	564154	MARYLAND	4	5	4933	5.3	260	4	9	6730	340	1	6709	352
	564632	WEST VIRGINIA	1	1	6340	5.3	339	1	6	5080	278	1	6398	323
8.S.	101316	MASSACHUSETTS NEW YDRK NEW JERSEY PENNSYLVANIA VIRGINIA	2 1 35 1 1	4 1 57 1 1	11417 10600 10784 10790 12010	4.2 4.3 4.1 3.7 4.0	478 453 444 403 485	2 14	18 18	11120 10253	483 417	1 1	11510 9468	481 399
	101870	NEW JERSEY PENNSYLVANIA DELAWARE MARYLAND VIRGINIA	1 1 1 24 1	1 2 2 44 2	7890 12470 10910 9717 9465	4.5 4.2 4.1 4.3 4.4	356 518 442 418 413	1 1 4 1	27 7 10 17	12430 9550 9552 10435	512 396 382 414	1 1 2 1	12448 11500 10212 10126	517 491 428 414
	114920	MARYLAND VIRGINIA	3 1	5 1	10593 8940	4.1 3.4	436 306	2	22	8550	337	1 1	8306 11249	353 456

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY RECORDS NO.	AV. MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
000	GUER	230757	VIRGINIA	3	7	7888	4.7	371							
		240189	MISSOURI	1	1	5440	4.4	239							
			VIRGINIA	7	12	5408	5.1	270							
		256553	VIRGINIA	4	19	7441	4.8	358							
		300553	VIRGINIA	5	5	9102	4.9	440							
	HOL.	680861	VIRGINIA	3	8	9602	3.8	361							
		797904	VIRGINIA	3	7	7028	3.3	234							
001	GUER	301627	PENNSYLVANIA	2	4	6959	5.3	369	2	10	6505	284	2	8377	404
			VIRGINIA	40	95	7378	5.0	371	8	19	8365	401	2	8479	396
			TENNESSEE	1	3	12040	4.9	584	1	5	9257	449			
		302440	PENNSYLVANIA	1	1	4570	5.3	241	1	14	8050	378	1	8022	358
			VIRGINIA	77	150	7183	4.9	352	11	13	8545	425	1	8441	404
		304445	VIRGINIA	3	6	7863	4.9	382							
		328741	VIRGINIA	5	7	7897	4.9	390	3	18	10172	440	2	10660	452
			NORTH CAROLINA	1	1	6500	4.7	303	1	96	8740	415			
		332877	VIRGINIA	22	46	8014	5.0	397	6	17	8942	390	1	10098	433
		347310	PENNSYLVANIA	1	1	8150	4.1	334	1	14	10600	397			
			VIRGINIA	67	150	7158	4.9	352	11	11	7786	389	2	8421	404
			NORTH CAROLINA	1	1	7880	5.0	390	1	58	7080	321	1	6911	327
		350780	VIRGINIA	3	3	8390	5.0	421	2	3	11205	462	1	9985	453
		353027	PENNSYLVANIA	2	9	7397	5.4	392	2	19	8491	407	4	8364	402
			MARYLAND	1	4	8498	5.0	425	1	7	8780	411	2	9271	421
			VIRGINIA	7	12	6820	5.3	367	3	22	10580	412	2	10459	386
		357771	VIRGINIA	2	3	7043	4.7	335	2	18	11183	446	2	11582	455
		366204	VIRGINIA	21	40	7488	5.0	376	9	23	9764	454	2	9219	447
		368488	PENNSYLVANIA	2	10	8554	4.6	381	2	21	8724	417	5	8571	415
			VIRGINIA	81	161	7847	5.0	386	10	18	9125	448	2	8819	432
		377185	VIRGINIA	4	6	9073	4.5	410	1	4	7980	328	1	9145	391
		380823	VIRGINIA	2	2	6310	5.3	331	2	29	9205	381	1	10116	407
		382230	VIRGINIA	13	27	8045	4.6	371	3	17	10129	444	2	8682	423
			FLORIDA	1	2	7430	4.3	318	1	27	7205	324	2	6529	306
		393672	VIRGINIA	4	8	8386	5.0	417	1	29	9665	502	2	9576	505
		398447	VIRGINIA	9	16	8549	4.9	418	4	19	8668	411	2	8153	379
		403128	VIRGINIA	15	20	8141	5.2	421	2	40	8395	443	1	8088	458
		419481	VIRGINIA	2	2	11355	4.7	515	2	14	10265	439	1	9898	418
		425949	VIRGINIA	8	18	8285	4.8	400	3	20	9466	461	2	8861	419
		429310	VIRGINIA	11	25	6720	5.1	339	1	2	8205	375	2	8578	363
		429672	VIRGINIA	1	1	5800	5.2	302	1	3	8490	372	1	9145	391
		432896	VIRGINIA	11	27	7474	5.0	368	4	4	7223	371	3	7204	344
		449924	VIRGINIA	3	4	6518	5.0	300	2	27	8630	357	1	12666	476
		450706	VIRGINIA	15	38	8821	5.2	455	7	28	8646	408	2	9637	445
			WEST VIRGINIA	2	6	6495	5.6	360	1	47	6800	335	1	6965	346
		462848	PENNSYLVANIA	1	3	9663	4.6	445	1	26	9357	440	2	9189	444
		469213	VIRGINIA	8	13	6974	5.1	345							
	HOL.	760474	NEW JERSEY	2	5	14102	3.8	529	1	25	12770	488	1	13625	499
			MARYLAND	3	7	12750	3.7	472	2	78	12370	454	3	12022	446
			VIRGINIA	322	564	12378	3.7	460	114	29	13010	488	1	12559	473
			WEST VIRGINIA	2	5	13849	3.7	503							
			NORTH CAROLINA	2	8	9557	3.4	316	2	14	10847	449	3	10478	410
		828187	VIRGINIA	8	27	10387	3.5	367	1	23	9610	326	1	10562	375

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	YEARLY HERD NO.	RECORDS NO.	MILK LB.	FAT LB.
	843274	ILLINOIS	1	1	14280	3.5	498	1	1	6410	223				
		MARYLAND	1	3	12537	3.7	455	1	19	13820	499	3	14112	516	
		VIRGINIA	161	359	11496	3.9	445	67	26	12402	471	2	12072	471	
		NORTH CAROLINA	2	9	14443	3.7	525	2	31	12581	442	3	12353	433	
		GEORGIA	1	1	7890	4.0	313	1	208	9860	353	1	9756	366	
	860768	NEW YORK	1	1	13040	3.7	486	1	17	13750	508				
		PENNSYLVANIA	2	3	11513	3.4	394	2	16	9633	360	2	10434	391	
		MARYLAND	11	24	13015	3.8	482	8	56	12513	466	2	12610	471	
		VIRGINIA	332	510	12744	3.6	462	212	32	12911	484	1	12778	481	
		WEST VIRGINIA	3	8	12829	3.3	432	1	5	12110	458	1	11816	443	
		NORTH CAROLINA	7	8	10701	3.6	377	6	26	10657	402	1	10411	392	
	863709	MARYLAND	1	1	17740	3.8	674								
		VIRGINIA	294	493	12405	4.0	489	105	31	12967	484	1	12633	475	
		NORTH CAROLINA	3	9	13544	3.7	498	3	20	11711	421	2	11864	436	
		GEORGIA	2	4	10822	3.6	394	2	4	11855	439	1	10279	395	
	873831	VIRGINIA	7	16	10285	3.7	378	1	31	9260	318	1	11151	386	
	885629	VIRGINIA	120	258	11223	3.5	394	13	44	13207	490	1	12611	461	
		GEORGIA	2	4	8502	3.3	281	1	4	11040	388	1	6398	228	
	935933	PENNSYLVANIA	1	1	14490	3.9	567	1	20	11070	414	1	12034	462	
		VIRGINIA	24	56	11992	3.8	456	9	23	12841	471	1	10816	418	
	944516	MARYLAND	1	1	6840	3.6	249	1	21	7930	308	1	9091	348	
		VIRGINIA	175	221	12599	3.8	477	129	36	12866	400	1	12747	482	
		NORTH CAROLINA	4	5	11893	3.7	435	4	24	11466	406	1	11767	424	
		GEORGIA	1	1	7770	3.5	270	1	3	7840	275	1	7761	279	
	947963	MARYLAND	1	1	11370	3.5	397	1	8	9080	353	1	9385	397	
		VIRGINIA	282	389	12808	3.7	471	154	38	12782	477	1	12767	482	
		NORTH CAROLINA	2	2	15315	3.5	531	2	37	13225	470	1	13816	485	
		TENNESSEE	22	44	10947	3.7	406								
	950314	NEW JERSEY	2	2	10480	3.7	383	1	4	13700	493	1	12862	483	
		PENNSYLVANIA	1	2	12090	3.8	449	1	11	10910	409	2	9881	373	
		MARYLAND	1	1	11090	3.8	417	1	8	9120	350	1	9385	397	
		VIRGINIA	253	432	12012	3.7	441	76	41	12646	473	1	12260	460	
		NORTH CAROLINA	1	2	17175	3.2	547	1	29	12390	436	1	12906	461	
		GEORGIA	1	2	12865	3.6	463								
	969743	MARYLAND	1	6	10927	4.0	430								
		VIRGINIA	150	273	12893	3.7	477	67	39	12496	475	1	12135	465	
		NORTH CAROLINA	3	7	12772	4.0	512	3	10	11008	422	2	11789	445	
	991721	VIRGINIA	46	124	11457	3.7	419	5	16	13696	496	2	11833	441	
	1009092	NEW YORK	1	1	6170	3.6	224	1	12	14720	570	1	15020	562	
		VIRGINIA	169	215	13042	3.6	474	127	35	12716	473	1	12592	473	
		WEST VIRGINIA	2	5	11393	3.3	379	1	4	7240	242	1	9091	318	
		NORTH CAROLINA	4	4	12445	3.7	456	4	37	8928	336	1	10233	394	
		TENNESSEE	1	2	11425	3.5	393								
	1019112	VIRGINIA	96	114	13085	3.8	495	85	39	12541	468	1	12449	468	
		NORTH CAROLINA	2	2	13950	3.8	525	2	43	9555	343	1	10110	344	
	1019631	VIRGINIA	27	41	12814	3.6	459	18	31	12793	482	1	12434	467	
	1033112	NEW JERSEY	1	2	11685	3.5	412								
		VIRGINIA	107	168	11999	3.7	440	58	26	12315	463	1	11971	455	
		WEST VIRGINIA	1	1	13060	3.2	413	1	32	14020	498	1	14017	500	
		NORTH CAROLINA	4	8	14686	3.4	497	4	28	12983	453	2	12941	460	
	1037300	VIRGINIA	121	146	12774	3.7	465	105	42	12651	476	1	12683	479	
		NORTH CAROLINA	6	7	12627	3.3	409	4	28	9670	354	1	10598	369	
		TENNESSEE	8	11	11162	3.6	402								
	1050088	VIRGINIA	24	34	12719	3.6	453	17	26	13256	461	1	12597	427	
	1062763	NEW JERSEY	1	2	13215	4.1	541								
		MARYLAND	1	1	10400	3.7	385	1	8	9560	379	1	11173	423	
		VIRGINIA	226	269	11616	3.8	444	185	34	12648	474	1	12513	475	
		NORTH CAROLINA	4	6	11185	3.8	425	4	29	10253	384	1	11272	403	
	1066477	VIRGINIA	75	76	13711	3.5	485	67	33	13495	506	1	13391	503	
	1069596	VIRGINIA	19	44	11935	3.6	426	6	12	13615	495	2	12558	463	
	1114553	VIRGINIA	21	21	13652	3.7	502	19	27	12596	473	1	13194	499	
	1162361	VIRGINIA	8	10	12162	3.6	438	8	27	11759	435	1	12109	443	

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CDTEMPORARY				AV. YEARLY HERD		
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
JER.		1189679	VIRGINIA	1	2	13065	4.7	617							
		1194714	VIRGINIA NORTH CAROLINA	18 1	20 1	12396 14900	3.8 4.2	475 622	17 1	33 3	12792 13180	485 441	1 1	13539 11227	506 398
		1198471	VIRGINIA	2	2	11480	4.0	459	2	24	11925	451	1	12617	476
		1221917	VIRGINIA	69	81	13288	3.6	474	63	36	12877	485	1	13101	490
		1253938	VIRGINIA	1	1	7810	3.9	302	1	3	7110	258	1	12393	452
		427020	MARYLAND VIRGINIA	1 3	2 3	5845 7637	4.5 5.3	265 406	1	8	6895	338	2	6867	344
		457805	VIRGINIA	1	1	7510	5.6	424							
		462695	VIRGINIA	3	5	9210	5.3	488	1	47	11080	590	1	9821	513
		475359	VIRGINIA	11	33	7659	5.0	383	1	3	9037	460	2	8682	468
		476202	VIRGINIA	8	23	7639	5.1	381	1	2	9006	464	2	8486	433
		476876	VIRGINIA	4	9	7893	5.2	409							
		477876	VIRGINIA	1	1	8770	4.7	416							
		487692	VIRGINIA	1	2	9215	4.5	407							
		487721	MARYLAND VIRGINIA	1 32	4 55	5603 7271	5.5 5.3	306 380	6	22	8939	440	1	8977	453
		491702	VIRGINIA	5	9	6964	5.8	396							
		493886	VIRGINIA	19	37	8338	5.4	444	6	39	9068	447	1	9299	475
		507616	VIRGINIA	3	4	8263	5.9	482							
		508398	VIRGINIA	9	14	8194	5.3	431	2	28	9675	482	1	9216	468
		508910	MARYLAND VIRGINIA	1 35	2 48	7580 8832	5.3 5.2	409 459	1 22	5 44	5985 8193	353 418	2 1	6573 8513	360 436
		513103	VIRGINIA	19	25	7802	4.9	380	8	48	8229	402	1	8101	402
		521758	VIRGINIA	6	7	6487	5.4	348	2	55	8060	403			
		526244	VIRGINIA	13	16	8061	5.1	413	2	41	8095	407	1	9025	452
		529904	VIRGINIA	22	26	7581	5.0	379	17	55	8362	437	1	8707	458
		534755	VIRGINIA	2	2	5960	4.5	274	1	16	8570	441	1	8786	442
	002	GUER	356241	MARYLAND VIRGINIA	1 10	3 19	7633 7966	4.6 4.6	352 363	1 1	16 3	8363 8975	418 468	2 1	9015 8142
	HOL.	813749	VIRGINIA	3	10	11984	3.6	428					1	9690	420
		861170	VIRGINIA	2	6	12644	3.6	456	1	4	10840	406	2	10470	402
004	GUER	253076	VIRGINIA	11	42	5742	5.0	287							
	HOL.	765129	VIRGINIA	5	15	9776	3.6	350							
		797903	VIRGINIA	2	5	6687	3.2	207							
005	GUER	319848	VIRGINIA ALABAMA	3 1	6 3	7271 9247	5.3 5.4	374 497							
	HOL.	806125	VIRGINIA	7	28	11298	3.5	392	1	3	11723	391	2	13031	433
006	GUER	259861	VIRGINIA	5	9	7708	5.4	411					2	10503	510
		281163	VIRGINIA	7	7	7339	4.8	354							
		348551	PENNSYLVANIA	1	2	7120	5.5	390	1	9	7780	359	1	7292	344
		354084	PENNSYLVANIA VIRGINIA	5 14	8 33	7501 7097	4.5 5.0	350 353	5 1	17 4	9313 9420	394 430	1 2	10099 6164	417 297
		422612	VIRGINIA	1	3	9103	4.7	429							
		423722	PENNSYLVANIA VIRGINIA	1 3	1 9	9530 8009	5.1 5.6	486 451	1 1	8 7	6330 9400	321 465	1 1	9450 8960	449 452

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
HOL.	782791	VIRGINIA	7	19	12754	3.5	442	1	2	15106	550	2	14192	512
	833728	MARYLAND	1	2	11025	3.8	411	1	4	10575	412	1	12273	447
		VIRGINIA	8	25	14259	3.7	530	3	39	11980	442	1	12732	452
		NORTH CAROLINA	2	7	10828	3.6	385	1	5	10555	369	3	9665	372
	881377	NEW JERSEY	1	1	12180	3.7	451							
		VIRGINIA	4	13	12607	3.4	429	1	15	9790	361	1	10399	378
		NORTH CAROLINA	4	18	10289	3.9	394	4	11	11360	397	3	10838	388
		GEORGIA	1	4	8533	3.9	326	1	68	11070	435	2	10230	392
	957224	VIRGINIA	23	61	12919	3.6	455	5	14	12685	496	2	12754	492
	1008255	VIRGINIA	16	44	12626	3.8	474	4	17	13996	507	2	14321	529
		NORTH CAROLINA	2	9	11443	3.7	421	2	13	11236	444	5	11596	416
JER.	393453	VIRGINIA	13	45	7508	5.8	434							
	426766	VIRGINIA	4	9	7950	5.8	467							
	452402	VIRGINIA	3	5	7570	5.2	382							
	490662	VIRGINIA	3	12	8545	4.8	404							
007 GUER	265432	VIRGINIA	4	13	6949	4.8	332							
	305140	VIRGINIA	10	24	6706	4.7	316	1	1	4200	273	1	7706	336
HOL.	924783	VIRGINIA	4	16	10544	3.5	372							
008 GUER	274127	NEW JERSEY	22	68	9262	4.6	424							
		PENNSYLVANIA	6	19	8937	4.6	412	3	11	8761	415	3	8135	397
		MARYLAND	1	1	8590	4.5	386	1	7	8480	374			
		VIRGINIA	3	17	7569	4.5	337							
		NORTH CAROLINA	2	5	11954	4.1	477							
	337308	VIRGINIA	5	10	7260	5.0	355							
	368486	VIRGINIA	3	12	7141	5.3	376							
	373698	MARYLAND	1	2	6825	4.8	329							
		VIRGINIA	20	57	7507	4.6	344	5	2	8981	428	3	9060	420
		NORTH CAROLINA	1	2	11000	4.5	492	1	157	8440	398	1	8818	405
	429311	VIRGINIA	1	1	3340	4.3	145							
HOL.	780220	VIRGINIA	14	51	11915	3.9	467	2	30	11975	458	1	14486	522
	862759	VIRGINIA	9	20	14496	3.4	491	3	10	12674	463	1	11423	422
	901366	VIRGINIA	15	41	10987	3.9	424							
	936780	VIRGINIA	8	15	12212	3.4	415	1	28	12550	497	1	13625	519
	1080642	VIRGINIA	21	42	11778	3.6	425	3	18	11527	452	1	9298	359
009 HOL.	801926	VIRGINIA	1	6	10983	3.3	364							
	911503	VIRGINIA	2	6	7762	4.0	308							
010 GUER	252169	VIRGINIA	1	1	9710	4.4	431							
HOL.	755042	VIRGINIA	1	4	14595	3.5	509							

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK TEST LB. PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO.	RECORDS	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
003	JER.	411075	OHIO	1	1	7680	5.2	401						
			MARYLAND	1	4	9348	5.8	546						
			NORTH CAROLINA	4	9	8003	4.7	380	4	16	7957	388	1	7357
			GEORGIA	1	3	7507	5.2	389						365

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY NO.	RECORDS MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	MILK LB.	AV. FAT LB.
001 AYR.	57230	WEST VIRGINIA	12	15	8579	4.3	367	2	9	10078	432	2	9620	388
	66467	WEST VIRGINIA	16	29	6627	4.3	283							
	71032	PENNSYLVANIA	2	5	6364	4.3	275	2	18	8155	304	2	8369	319
		WEST VIRGINIA	4	6	9053	4.4	390	1	22	8830	359	1	9810	409
	74221	PENNSYLVANIA	1	2	8555	3.8	326							
		WEST VIRGINIA	10	18	8748	4.3	370							
	76927	OHIO	1	1	8510	4.5	380							
	77131	WEST VIRGINIA	1	1	7350	4.6	341							
	79280	MARYLAND	1	2	6935	4.1	285	1	18	6705	278	2	7096	301
		WEST VIRGINIA	8	14	8264	4.2	343	1	3	6270	238	1	5537	228
	80259	PENNSYLVANIA	2	4	8272	4.3	355	1	16	8450	319	3	7968	302
		WEST VIRGINIA	26	47	8716	4.2	365	6	22	9662	395	2	9523	393
		NORTH CAROLINA	1	1	5210	3.6	190							
	81687	WEST VIRGINIA	6	18	7855	4.3	336							
GUER	98369	MARYLAND	2	2	9035	4.0	358	2	14	7490	306	1	7102	288
		WEST VIRGINIA	3	7	9918	4.1	400							
	258233	WEST VIRGINIA	2	5	5653	4.9	276							
	288894	INDIANA	1	1	10540	4.8	509							
		MARYLAND	1	2	6060	5.2	314							
		WEST VIRGINIA	16	41	6369	5.0	317	2	25	6572	307	2	7247	348
		OREGON	1	1	10660	5.3	569							
	327011	PENNSYLVANIA	3	6	6286	5.2	328	3	12	9326	405	2	8039	388
		DELAWARE	2	4	7429	5.0	365	1	7	6720	318			
		MARYLAND	58	149	7328	5.1	371	34	10	8768	389	2	8477	383
		WEST VIRGINIA	1	1	8320	4.7	388							
	328179	MARYLAND	2	2	8925	4.3	376	2	6	8090	398	1	7783	378
		VIRGINIA	1	1	9190	4.4	407							
		WEST VIRGINIA	16	41	7301	4.6	334	4	13	7637	373	2	8418	374
HDL.	337537	WEST VIRGINIA	9	28	7042	4.5	318							
	344980	MARYLAND	2	10	6725	5.3	353	2	8	6357	284	4	6291	292
		WEST VIRGINIA	23	55	6135	4.7	289	2	11	6229	291	2	6778	313
		KENTUCKY	1	2	5350	5.0	264							
	354007	MARYLAND	5	19	6999	4.8	336	1	5	7280	353	1	9156	451
		WEST VIRGINIA	2	4	6656	4.6	303							
	376285	MARYLAND	1	3	7570	5.5	413	1	7	10097	445	1	8884	419
		WEST VIRGINIA	12	26	6320	4.9	307							
	404466	WEST VIRGINIA	5	6	7161	4.7	329							
	420924	MARYLAND	1	1	9460	5.2	497	1	8	8000	375	1	7783	378
		WEST VIRGINIA	24	55	7939	4.7	377	9	8	8198	380	1	8178	385
	758057	WEST VIRGINIA	5	18	10914	3.7	407							
	763711	OHIO	1	1	12690	3.7	469							
		MARYLAND	1	4	9545	3.7	356	1	13	9263	364	3	7765	301
		VIRGINIA	1	1	10710	3.2	340							
		WEST VIRGINIA	13	31	10311	3.6	369							
	780858	MARYLAND	1	6	9320	3.9	358	1	14	9677	375	4	7995	312
		WEST VIRGINIA	15	38	10493	3.6	376	2	8	10367	378	1	10900	411
	803706	MARYLAND	2	8	12357	3.7	461	2	3	15344	539	4	11996	455
		VIRGINIA	5	13	12303	3.6	442	2	67	13503	502	4	12118	459
		WEST VIRGINIA	39	109	11174	3.7	407	9	8	11707	427	2	11384	425
	863287	OHIO	3	11	13101	3.6	471	3	7	11727	414	3	11809	422
		MARYLAND	3	12	16439	3.9	634	1	5	14460	560	3	13389	516
		VIRGINIA	2	6	13237	3.6	474							
		WEST VIRGINIA	47	140	11020	3.7	409	5	4	12190	455	3	11183	422
	879612	WEST VIRGINIA	4	15	10776	3.8	407							
	880188	MAINE	2	9	13390	3.6	478	2	18	11739	458	4	11479	445
		NEW HAMPSHIRE	50	107	11479	3.6	408	42	17	11656	445	2	11178	427
		VERMONT	38	80	10720	3.7	395	7	7	13094	496	2	12571	483
		CONNECTICUT	2	7	12320	3.8	458	2	31	13890	547	4	11750	517

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	AV. FAT LB.	RECORDS NO.	MILK LB.	AV. FAT LB.
		NEW YORK	1	4	13725	3.9	525							
		PENNSYLVANIA	2	2	8095	3.7	301							
	893168	MARYLAND	1	4	10473	3.9	413	1	11	10438	394	4	8737	338
		WEST VIRGINIA	21	46	10585	3.7	391	5	11	11925	434	2	10445	383
	901316	MARYLAND	2	3	15023	3.5	533	2	16	14610	542	1	12241	446
		VIRGINIA	5	16	11736	3.6	418							
		WEST VIRGINIA	94	216	10431	3.6	378	39	18	10558	400	2	10557	401
	903260	PENNSYLVANIA	4	9	13660	3.7	499	4	11	11753	439	2	12020	460
		MARYLAND	1	1	7740	3.2	251	1	9	9340	334			
		VIRGINIA	1	1	10970	3.4	367	1	6	11800	445	1	9374	366
		WEST VIRGINIA	186	289	11576	3.6	409	94	16	11046	405	1	10843	400
	908242	PENNSYLVANIA	1	4	15200	3.4	508							
		OHIO	2	5	13590	3.5	468	2	6	13348	467	2	12917	455
		MARYLAND	1	1	17040	2.9	500							
		VIRGINIA	1	4	11608	3.5	408	1	1	13960	518	3	10562	394
		WEST VIRGINIA	54	147	10297	3.6	366	3	15	10234	366	3	10053	365
	929791	PENNSYLVANIA	1	3	9170	4.1	377	1	16	11843	432			
		VIRGINIA	1	3	8353	3.8	318							
		WEST VIRGINIA	28	87	10419	3.7	386	2	9	11460	420	2	10664	393
	1009405	PENNSYLVANIA	1	1	12430	3.5	440	1	14	10530	371			
		OHIO	1	2	9450	3.7	344	1	9	7045	306	1	6987	328
		MARYLAND	2	5	11787	3.6	425	2	26	11593	442	3	13709	498
		VIRGINIA	3	8	13411	3.6	485	2	96	13625	508	1	13675	513
		WEST VIRGINIA	80	128	10198	3.7	372	44	16	10601	396	1	10732	400
	1073669	WEST VIRGINIA	6	8	11477	3.7	420	6	14	11168	415	1	10540	396
	1080652	WEST VIRGINIA	8	14	10397	3.6	362	4	19	12305	438	1	11889	439
	1132120	OHIO	1	2	12670	3.2	412	1	3	12200	414	2	11260	402
		WEST VIRGINIA	4	6	9140	3.8	347	2	8	9915	330	2	9017	328
	1138758	WEST VIRGINIA	2	2	9145	3.4	309	1	6	9790	327	1	8437	307
JER.	379063	WEST VIRGINIA	12	41	6771	5.3	355	7	1	7282	384	1	7456	341
	379541	WEST VIRGINIA	7	19	8261	5.1	417	4	5	8005	373	1	10791	414
	401972	NEW YORK	1	4	6770	5.6	379	1	14	9270	473	3	8556	448
		WEST VIRGINIA	17	45	7304	5.5	396	1	4	6950	412	2	7516	416
		WASHINGTON	1	1	6710	6.2	415	1	5	6470	390			
	418408	WEST VIRGINIA	1	3	5377	5.1	273							
	419048	WEST VIRGINIA	4	13	6413	5.4	348							
		GEORGIA	1	1	6720	4.9	333							
	419788	WEST VIRGINIA	3	4	6212	5.7	351							
	420893	WEST VIRGINIA	27	59	6556	5.0	328							
	452051	NEW YORK	1	3	10387	5.4	556							
		VIRGINIA	1	4	8183	5.6	461							
		WEST VIRGINIA	15	28	6964	5.5	378	1	8	6960	344	1	6278	327
	456460	WEST VIRGINIA	13	25	6133	5.2	317	13	30	6283	318	1	6938	349
	457763	WEST VIRGINIA	13	33	7138	5.4	379	1	58	7040	372	1	7990	436
	457835	WEST VIRGINIA	25	56	6431	5.4	343	4	13	6351	319	1	6641	343
	471955	WEST VIRGINIA	20	32	7297	5.1	369	1	26	5950	289	1	6398	311
	480522	WEST VIRGINIA	5	18	5217	5.6	292							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERO				
									NO. OAUS.	RECORDS NO.	MILK LB.	AV. FAT LB.	RECORDS NO.	MILK LB.	AV. FAT LB.		
001	HOL.	813911	NEW YORK	86	254	13640	3.8	512	7	3	15197	571	2	12801	465		
			PENNSYLVANIA	5	10	11677	3.9	450	4	11	11546	443	1	10847	441		
			NORTH CAROLINA	110	224	13403	3.7	498	104	34	13372	491	2	13230	475		
		893732	NORTH CAROLINA	55	80	13907	3.7	515	52	43	13757	538	1	13608	503		
		894663	VIRGINIA	2	2	12530	3.6	443	1	16	12610	475					
			NORTH CAROLINA	96	154	13698	3.5	484	93	41	13383	504	2	13331	487		
		908248	VIRGINIA	1	1	13510	3.3	449	1	16	12700	472					
			NORTH CAROLINA	60	74	12668	4.0	499	58	44	14079	543	1	13660	506		
		913292	NEW YORK	1	1	16370	3.3	538	1	27	14890	563					
			NORTH CAROLINA	73	120	11576	3.6	418	69	22	11560	429	1	11534	418		
		1156943	NORTH CAROLINA	16	20	14381	3.7	522	16	37	13247	500	1	13763	499		
		1159062	NORTH CAROLINA	33	45	13721	3.6	496	32	43	13570	520	1	13556	496		
		1194894	NORTH CAROLINA	16	19	12794	3.8	483	16	60	13515	496	1	13776	505		
		1205729	NORTH CAROLINA	23	26	11633	3.7	431	22	41	13296	501	1	13288	489		
		1207114	NORTH CAROLINA	12	13	13347	3.9	523	11	65	14725	587	1	14926	547		
		1223375	NORTH CAROLINA	13	17	12337	3.8	462	10	65	13181	468	1	13075	467		
1226332	NORTH CAROLINA	6	6	14073	3.8	525	6	77	14447	578	1	14613	526				
1230614	NORTH CAROLINA	7	7	13457	3.8	516	6	43	13850	529	1	13898	524				
1237407	NORTH CAROLINA	10	12	11707	3.7	431	9	44	11856	467	1	11820	445				
002	HOL.	797043	NORTH CAROLINA	8	15	11223	3.7	408									
		858365	NORTH CAROLINA	9	25	12195	3.4	411	9	37	13779	488	2	13357	467		
		858410	NEW YORK	2	5	11595	3.4	384									
			NORTH CAROLINA	62	135	12812	3.6	464	57	31	13152	484	2	12923	465		
			SOUTH CAROLINA	1	1	13450	3.4	461	1	46	11030	387					
		874987	NORTH CAROLINA	49	97	12231	3.5	428	45	27	13380	478	2	12641	450		
		890298	NORTH CAROLINA	15	39	11345	3.6	407	9	34	13062	459	3	12408	437		
		926707	NORTH CAROLINA	9	29	11562	3.6	418	1	18	11950	430	1	11565	407		
		1023379	NORTH CAROLINA	7	11	10323	3.6	371	3	9	13245	462	2	12164	438		
		1033682	NORTH CAROLINA	13	19	9245	3.4	310									
		1096806	NORTH CAROLINA	15	30	14183	3.4	481	14	43	13638	497	2	13874	488		
		1098221	NORTH CAROLINA	22	55	11700	3.8	439	22	30	12865	468	2	13550	493		
		1123156	NORTH CAROLINA	14	29	12771	3.6	459	13	17	12349	452	2	12132	445		
		1145404	NORTH CAROLINA	7	10	13595	3.6	491	7	38	13079	472	2	12859	458		
		003	HOL.	782352	NEW YORK	1	1	10060	3.6	357							
					INDIANA	5	9	9789	3.5	337	4	3	11983	424	1	12140	442
ILLINOIS	20				40	11642	3.7	429	4	6	12011	435	3	11535	436		
MICHIGAN	1				1	11750	3.4	400									
WISCONSIN	178				496	11068	3.6	400	91	15	11436	412	2	11398	416		
IOWA	1				4	13778	3.2	436	1	5	11637	425	1	12600	432		
NEBRASKA	1				1	11880	3.6	432									
VIRGINIA	3				6	11756	3.5	415									
WEST VIRGINIA	1				4	8965	3.7	330									
NORTH CAROLINA	20				55	10887	3.7	398	12	10	10939	399	3	10357	376		
GEORGIA	8				12	8709	3.7	320	3	10	8280	317	1	6960	261		
FLORIDA	1				1	11550	3.4	390									
OKLAHOMA	1				1	13610	3.9	532									
TEXAS	1				4	15490	3.7	579	1	9	14088	506	3	13738	499		
UTAH	1				3	12777	3.5	442	1	5	12237	432	1	11739	421		
JER.	431207		INDIANA	1	2	9255	5.4	498									
			WISCONSIN	13	36	7374	5.4	394	6	10	7262	388	2	7549	375		
			IOWA	1	3	6337	6.1	388									
			NORTH CAROLINA	2	4	6424	5.1	329	1	17	7937	343	3	7797	339		
			GEORGIA	1	2	6675	5.3	349									
			FLORIDA	8	27	7542	5.3	399	4	35	7561	390	3	8272	417		
			435238	INDIANA	3	4	9162	4.3	374								
			MICHIGAN	5	9	6963	4.7	329	2	14	8617	444	2	7172	368		

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAUS.	CONTEMPORARY NO. RECORDS	MILK LB.	FAT LB.	AV. YEARLY HERD NO.	RECORDS MILK LB.	FAT LB.
			MARYLAND	2	10	11240	5.4	608							
			NORTH CAROLINA	9	25	8336	4.6	380	8	19	8093	396	2	7908	390
			GEORGIA	16	49	7747	5.0	386	9	9	7887	386	3	8145	402
			FLORIDA	26	80	7659	4.8	367	11	34	7570	374	2	7203	350
			TENNESSEE	1	1	3630	3.8	137							
		447076	NORTH CAROLINA	3	4	6877	5.6	371							
			FLORIDA	4	12	6743	5.2	352	2	35	6817	338	1	6736	313
004	GUER	321365	NORTH CAROLINA	2	2	5275	4.9	255	2	35	7225	381	1	8257	413
		324231	VIRGINIA	1	2	9910	5.3	526	1	8	9230	453	1	8960	458
			NORTH CAROLINA	3	5	6310	5.0	316	2	10	7918	388	1	7892	387
		372734	NORTH CAROLINA	9	23	7740	4.9	376	9	19	8490	397	2	8303	390
		373804	NORTH CAROLINA	4	13	6671	5.2	337	2	8	9302	417	3	8920	410
		437208	MARYLAND	1	3	6643	4.5	303							
			NORTH CAROLINA	3	4	8097	5.2	422	2	34	6950	359	1	8219	413
HOL.		860428	NORTH CAROLINA	5	9	11916	3.6	421	5	13	10783	417	2	10097	391
			GEORGIA	1	1	10220	3.7	383							
		941746	NORTH CAROLINA	39	60	10505	3.6	373	34	13	10716	383	1	10610	381
			GEORGIA	1	2	15575	3.1	490	1	8	15505	558	1	13331	472
		1023378	NORTH CAROLINA	24	55	10590	3.6	382	21	13	11101	412	2	10628	394
		1082843	NORTH CAROLINA	47	64	10752	3.6	383	45	22	10130	366	1	10635	382
		1127214	NORTH CAROLINA	7	12	9555	3.7	351	7	23	10426	381	2	10823	391
075	JER.	454049	VERMONT	1	1	7400	5.2	385							
			INDIANA	4	9	9235	5.2	480	4	9	9753	496	2	9296	477
			ILLINOIS	6	19	8902	5.4	478	3	4	9680	492	1	8986	477
			MICHIGAN	2	5	9334	5.3	491	2	13	8614	445	2	7848	412
			WISCONSIN	8	14	6066	5.4	328	4	10	7668	402	1	7189	391
			MINNESOTA	1	1	8080	5.6	451	1	7	7460	381	1	7085	376
			IOWA	2	6	5914	5.7	356	1	5	7736	406	5	7510	398
			NORTH CAROLINA	3	6	7769	5.6	437	2	13	8683	397	2	8840	414
			GEORGIA	8	10	6633	4.7	310	2	24	6565	325	1	8731	431
			FLORIDA	11	24	6976	5.3	368	8	43	7765	382	2	8274	412
			MISSISSIPPI	1	3	6030	5.7	344	1	43	6613	355	1	6486	350
			COLORADO	1	8	6751	5.4	366	1	2	6616	328	5	6610	356
		475547	VERMONT	1	1	5520	6.3	347							
			MASSACHUSETTS	1	1	7350	5.0	364							
			NEW YORK	1	3	7693	6.3	481					1	8611	395
			INDIANA	1	1	6320	5.6	352	1	4	7720	395	1	7216	359
			MICHIGAN	2	4	7130	5.7	403	1	11	6985	363	2	6824	373
			NORTH CAROLINA	3	5	7172	5.9	421	1	18	8190	427	1	7118	376
			GEORGIA	16	24	7280	5.1	370	1	37	5790	300			
			FLORIDA	8	16	8355	4.8	396	3	66	8024	398	2	7762	385
			ALABAMA	1	2	7775	5.3	409	1	2	9360	479			
			MISSISSIPPI	3	4	5748	5.5	313	3	35	7367	372	1	6584	335

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREEO	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERO					
									NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.			
001	GUER	312671	NORTH CAROLINA	1	1	7340	4.8	351										
			SOUTH CAROLINA	38	57	6638	4.9	324	15	36	7801	346	1	7193	321			
			FLORIDA	1	1	6820	3.9	266	1	26	8040	359	1	8448	367			
		336748	SOUTH CAROLINA	37	73	7363	4.6	338	9	14	9003	396	2	7974	352			
			FLORIDA	1	6	8703	4.4	384	1	81	8950	398	4	8556	401			
		341821	SOUTH CAROLINA	2	2	6480	4.7	303										
			358545	NORTH CAROLINA	2	4	8219	4.5	372	2	19	7994	349	2	7158	308		
		SOUTH CAROLINA		35	64	7718	4.7	361	8	43	8940	395	1	7777	342			
		GEORGIA		1	1	9470	4.7	448										
		FLORIDA		1	3	9550	5.0	475	1	125	9537	452	3	8945	418			
		360429	SOUTH CAROLINA	50	98	7167	4.6	325	13	22	8503	374	1	8105	337			
			GEORGIA	2	2	6700	5.1	338										
			FLORIDA	1	2	6440	4.7	309										
		408248	SOUTH CAROLINA	1	3	6683	4.5	300										
		408749	SOUTH CAROLINA	1	1	5650	4.9	274										
		420130	SOUTH CAROLINA	9	18	7194	4.9	351	5	63	9594	397	2	9317	384			
			FLORIDA	1	2	8550	4.6	395	1	59	7630	334	1	8448	367			
		426011	NORTH CAROLINA	2	3	8065	4.9	396	1	9	6520	313	1	5690	269			
			SOUTH CAROLINA	15	28	7724	4.8	369	10	17	8251	361	2	7653	324			
		446932	SOUTH CAROLINA	9	16	6172	4.5	274	7	48	3163	341	2	8168	352			
		456118	SOUTH CAROLINA	14	27	6194	4.9	304	6	33	8239	361	2	7822	343			
		472084	SOUTH CAROLINA	4	9	8896	4.6	407	2	75	8865	399	2	8764	396			
		483063	SOUTH CAROLINA	1	2	12035	3.8	456	1	120	11360	419	2	11576	421			
		488398	SOUTH CAROLINA	1	2	4490	5.3	238	1	58	6880	309						
		HOL.		802216	SOUTH CAROLINA	5	17	11940	3.6	430	3	10	11834	431				
					859031	PENNSYLVANIA	10	22	9179	3.8	346	2	4	9525	361	1	8960	359
						MICHIGAN	1	1	16290	3.2	522							
				DELAWARE		65	195	11050	3.8	420	28	9	11286	438	2	11293	437	
				MARYLAND		10	45	10270	3.6	370	4	10	11024	407	2	9302	373	
				SOUTH CAROLINA		59	111	10378	3.7	380	50	57	10586	385	1	10151	370	
GEORGIA	1			1		6820	3.8	257	1	44	10310	387	1	10867	427			
909226	NEW YORK			1	1	11600	3.6	415										
	SOUTH CAROLINA			15	26	11465	3.8	434	9	30	11998	431	2	10439	374			
	GEORGIA			1	1	11990	3.7	449										
951671	NORTH CAROLINA			2	3	12038	3.4	410	2	11	11140	387	2	10407	361			
	SOUTH CAROLINA			63	121	11154	3.5	395	50	49	10762	386	1	10384	372			
	GEORGIA			5	10	10293	3.7	378	5	58	10145	380	1	10294	394			
1001035	NORTH CAROLINA			1	1	10100	3.3	329	1	22	9900	346	1	10159	350			
	SOUTH CAROLINA			119	223	10408	3.7	384	83	49	10651	381	1	9727	352			
	GEORGIA			3	3	10123	3.8	384	3	84	9820	360	1	10083	380			
1010200	NORTH CAROLINA			2	5	10702	3.5	371	2	20	9820	356	1	11619	433			
	SOUTH CAROLINA			37	78	12649	3.5	444	24	40	11883	433	1	11596	420			
1040722	NORTH CAROLINA			1	1	9280	3.6	332	1	27	10260	378	1	11619	433			
	SOUTH CAROLINA			30	68	10728	3.6	382	25	34	11120	406	2	10651	380			
1146532	SOUTH CAROLINA			36	55	10658	3.6	384	34	46	11025	397	1	10804	380			
1149008	NORTH CAROLINA			1	2	9580	3.4	324	1	9	11515	399	2	10377	359			
	SOUTH CAROLINA			33	42	9625	3.5	333	30	47	10666	384	1	10475	373			
	GEORGIA			1	1	10650	3.3	347	1	86	9820	361	1	10083	380			
1214604	SOUTH CAROLINA			29	32	12091	3.6	436	29	76	11167	396	1	10762	370			
1238225	SOUTH CAROLINA			12	14	10053	3.4	343	12	85	9915	340	1	10681	366			
1238226	SOUTH CAROLINA			14	15	11566	3.4	392	14	69	10377	353	1	10512	355			
1248077	VIRGINIA			1	1	9310	4.4	408	1	50	11900	445	1	11772	413			
	SOUTH CAROLINA			16	17	11192	3.6	402	16	50	11372	393	1	11556	397			
1263243	SOUTH CAROLINA			13	13	11765	3.6	427	12	44	12613	446	1	12325	432			
JER.		455922	SOUTH CAROLINA	3	4	5518	5.4	295										

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY RECORDS NO.	AV. MILK LB.	FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
		464605	SOUTH CAROLINA	7	13	6370	5.3	330							
		473447	SOUTH CAROLINA	2	5	6710	5.2	351					1	9080	344
		503050	RHOEE ISLAND SOUTH CAROLINA	2 4	2 9	6250 6598	5.1 5.2	318 337					1	7837	384
		504932	SOUTH CAROLINA FLORIDA	4 1	5 1	3886 7620	5.2 4.9	207 373							
		548414	SOUTH CAROLINA	2	2	8030	5.0	399	2	18	10845	473	1	8906	411
		559104	SOUTH CAROLINA	5	10	6884	5.2	358	5	16	7220	357	1	7303	362
		561233	SOUTH CAROLINA	5	6	8058	5.2	418	3	14	6643	327	1	7071	359
		567973	SOUTH CAROLINA	3	4	6000	5.3	315	3	19	8142	395	1	7625	387
8. S.		77887	SOUTH CAROLINA GEORGIA	48 2	160 5	11627 9889	4.0 4.3	458 418	11	14	9910	405	1	9928	414
		82513	NEW YORK SOUTH CAROLINA	1 10	1 30	9440 11350	4.2 4.1	396 459							
		87283	SOUTH CAROLINA GEORGIA	24 1	57 3	9791 14030	4.0 3.9	391 542	9	29	10256	411	1	9499	378
		91228	SOUTH OAKOTA SOUTH CAROLINA GEORGIA	1 22 3	1 41 6	10210 12095 9428	4.1 3.9 4.2	419 472 389	6	22	9490	368	1	10170	414
		106903	SOUTH CAROLINA GEORGIA	26 4	46 7	10858 9677	4.1 4.0	442 389	6	17	8904	359	1	10052	396
		109931	SOUTH CAROLINA	15	22	9465	4.1	398	8	18	9379	378	1	9306	367
		119495	SOUTH CAROLINA	3	3	7907	3.7	312	2	19	10525	428	1	11020	402
		122787	IOWA SOUTH CAROLINA	1 1	1 1	7570 14890	4.1 4.2	310 632	1	18	9390	367	1 1	12448 9145	507 359
002	GUER	314721	FLORIDA	4	11	9093	4.7	422	3	70	8164	401	3	7992	398
		418729	NORTH CAROLINA SOUTH CAROLINA	2 20	3 49	8053 8306	4.6 4.2	367 350	2 17	26 16	8723 8049	447 358	2 2	9669 8035	514 357
		448141	NORTH CAROLINA SOUTH CAROLINA	1 13	2 27	7035 7529	4.9 4.4	347 336	1 10	64 17	7675 8090	331 353	2 2	7194 8004	277 354
		450335	SOUTH CAROLINA	9	11	6747	4.7	318	9	17	8192	356	1	7937	362
		459866	NORTH CAROLINA SOUTH CAROLINA GEORGIA	1 8 1	2 15 3	7520 8130 11100	4.3 4.4 4.6	318 358 510	1 6 1	29 31 65	6385 7815 9177	267 349 441	2 2 2	6927 7592 8759	298 342 414
		465658	SOUTH CAROLINA	15	25	7525	4.4	327	15	22	7944	358	2	7679	344
003	GUER	299233	SOUTH CAROLINA	5	13	8647	4.9	424							
	HOL.	764791	SOUTH CAROLINA	5	14	10914	3.5	391	2	62	12120	438	1	11260	398
	JER.	390504	SOUTH CAROLINA	1	2	5380	5.4	287							
		464606	SOUTH CAROLINA GEORGIA	11 1	16 1	6907 5660	5.2 5.1	357 288	2	34	7960	333			
	B. S.	59466	MASSACHUSETTS SOUTH CAROLINA	1 5	1 17	10730 10512	4.1 4.0	444 416							
006	HOL.	1007357	OHIO ILLINOIS WISCONSIN ALABAMA MISSISSIPPI ARKANSAS TEXAS	1 11 98 1 2 1 1	1 16 160 1 5 1 1	10590 12998 12642 10380 11002 10530 13490	4.0 3.7 3.6 3.7 4.0 3.7 3.7	428 486 452 379 435 367 498	1 11 92 1 2 1 1	14 11 14 30 15 8 35	9780 13430 12360 9200 12035 9540 12770	358 488 448 364 455 347 445	1 1 1 1 2 1 1	9690 13967 12242 8993 11772 11903	355 516 439 353 450 413

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.		
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	NO.	RECORDS LB.	AV. LB.
001	GUER	300727	KENTUCKY	1	1	8500	4.4	375	1	9	7580	357	1	7390	347
		314183	KENTUCKY	18	40	8490	4.6	392	12	10	9317	373	1	9051	373
		316780	KENTUCKY	15	32	7573	4.4	333	12	6	8367	364	1	8668	361
		327238	MICHIGAN	4	9	10129	5.0	493	2	29	8870	437	1	9331	460
			KENTUCKY	4	11	7262	5.2	385	2	8	6870	338	2	5581	271
			ALABAMA	4	10	9478	4.8	448	3	15	10138	400			
		336251	KENTUCKY	4	7	7136	5.1	361	4	4	9289	448	3	7041	349
		348637	KENTUCKY	8	22	7352	4.7	346	8	5	7958	338	2	8214	355
		349574	KENTUCKY	5	10	9062	5.0	443	3	10	7664	378	1	7901	391
		358884	KENTUCKY	6	11	8943	4.4	393	2	8	9513	439	2	8724	370
		366145	MICHIGAN	1	2	10835	5.0	544							
			KENTUCKY	12	24	7987	5.0	395	9	18	10882	448	2	9867	417
			LOUISIANA	1	1	6650	5.4	362							
		366691	KENTUCKY	10	24	7871	4.8	378	8	7	8372	371	2	8686	396
		380917	KENTUCKY	10	18	6704	4.9	325	9	7	9418	383	2	8671	346
		381133	MINNESOTA	1	3	6780	5.1	347	1	4	12087	494	3	13283	482
			KENTUCKY	5	18	7222	4.5	318	1	8	7884	349	4	7232	336
		382612	KENTUCKY	7	15	7766	5.0	385	4	7	8276	394	2	7489	361
		388175	KENTUCKY	28	57	7277	4.5	324	19	7	8131	349	2	8086	349
		396783	KENTUCKY	10	14	8336	4.7	386	3	5	8030	344	1	7161	311
		398094	KENTUCKY	1	1	7760	5.2	402							
			TENNESSEE	1	1	4480	4.7	209							
		399883	PENNSYLVANIA	13	25	7512	5.0	368	4	7	8606	379	2	7515	345
		399886	KENTUCKY	16	24	7512	4.8	360	14	7	8869	390	1	8840	393
		407927	KENTUCKY	3	3	7470	4.6	342	3	8	11477	431	1	11122	426
		420927	KENTUCKY	1	2	6125	5.9	361	1	11	7955	348	1	8840	391
		426664	KENTUCKY	26	37	7468	4.5	338	19	11	8851	381	1	8552	363
		439005	KENTUCKY	18	30	7373	4.5	332	14	7	8691	360	1	8681	358
		442534	KENTUCKY	1	1	5670	4.8	270	1	6	8110	353	1	6191	279
		447172	KENTUCKY	4	7	6449	4.7	304	3	17	9845	418	1	9374	429
		471998	MICHIGAN	1	1	7650	3.7	284	1	7	6760	288			
		477210	KENTUCKY	2	3	7280	4.1	292	2	13	7480	312	1	5505	249
HOL.	743729	KENTUCKY	2	2	8185	3.4	281	2	14	9790	350	1	9385	352	
	752106	MARYLAND	1	1	9950	4.2	419								
		NORTH CAROLINA	8	27	11118	3.7	406	8	8	12395	453	2	13490	489	
		KENTUCKY	66	209	11515	3.6	410	51	13	10576	387	3	10471	385	
	786317	KENTUCKY	2	8	12706	3.6	451	2	19	14072	511	3	13465	490	
	845522	KENTUCKY	23	48	10439	3.6	377	20	18	10581	384	2	10927	404	
	859074	KENTUCKY	1	2	12755	3.5	445	1	18	12460	433	1	13832	473	
	871713	KENTUCKY	61	135	10387	3.7	383	56	16	10996	396	2	10520	376	
	889439	KENTUCKY	3	10	9664	3.7	361								
	890360	KENTUCKY	94	296	10993	3.7	400	82	14	10861	395	3	10556	386	
	897177	KENTUCKY	41	99	11066	3.5	389	37	9	10706	401	2	10515	386	
	904863	CONNECTICUT	1	1	12650	3.6	461								
		KENTUCKY	149	289	11607	3.6	438	145	17	11727	428	2	11146	411	
		TENNESSEE	2	2	7545	3.6	270								
	905788	NEW YORK	1	1	6440	3.7	238								
		OHIO	1	1	10120	3.3	336	1	18	10050	356	1	13887	496	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPDRARY				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		INDIANA	1	2	10385	3.3	340	1	6	12790	469	2	12273	448
		ILLINDIS	1	2	12840	3.6	453	1	5	13650	503	1	11772	423
		GEORGIA	1	5	13312	3.7	488	1	21	13538	488	5	12430	455
		KENTUCKY	284	517	11563	3.5	402	273	15	11532	423	2	11135	407
		TENNESSEE	1	1	4230	3.5	148							
	912745	KENTUCKY	12	37	11057	3.5	385	3	5	11233	405	3	10210	381
	915214	KENTUCKY	6	24	11158	3.6	395	3	15	10064	393	4	11662	445
	922940	KENTUCKY	53	105	11109	3.7	403	47	13	11020	405	2	10680	393
	926492	KENTUCKY	120	204	11374	3.5	403	110	17	11832	437	1	11495	424
	938232	KENTUCKY	24	92	11511	3.6	408	15	10	11337	407	3	11428	418
	950444	INOIANA	1	1	13150	3.6	471	1	2	16010	504	1	12110	434
		ILLINOIS	1	2	13745	3.8	527	1	20	13170	465	1	11772	423
		GEDRGIA	1	5	11202	4.2	470	1	18	9786	357	2	11663	428
		KENTUCKY	175	330	10759	3.8	403	167	15	11115	407	2	10840	400
	969670	MARYLAND	1	1	12640	3.6	460							
		GEORGIA	1	2	12495	3.8	473	1	16	12915	474	2	12126	447
		KENTUCKY	58	129	11148	3.7	405	53	15	11101	405	2	10519	385
	971208	MARYLAND	1	1	9660	3.7	358							
		KENTUCKY	119	182	10927	3.9	421	112	17	11455	418	1	11065	407
		ALABAMA	1	1	14280	3.7	534							
	982063	KENTUCKY	19	40	10062	3.7	368	16	11	11884	431	1	11072	395
	1026408	KENTUCKY	21	36	13143	3.5	451	20	29	13595	476	2	11989	414
	1042334	KENTUCKY	5	7	13046	3.4	443	5	11	13772	491	1	12155	430
	1049615	KENTUCKY	29	45	11325	3.7	417	27	14	11495	434	1	11014	424
	1061285	KENTUCKY	1	1	12770	4.0	513	1	7	17120	597	1	11064	373
	1063373	KENTUCKY	116	224	11517	3.5	402	112	15	10882	399	2	10899	400
	1080298	KENTUCKY	4	5	9985	3.6	361	4	20	13328	486	1	12508	440
	1091800	KENTUCKY	4	5	12164	3.8	454	4	18	11553	439	1	10103	429
	1100926	KENTUCKY	13	17	12151	3.6	435	10	32	12021	437	1	11536	423
	1103891	KENTUCKY	25	40	11480	3.9	443	24	28	12691	463	2	12260	447
	1105690	KENTUCKY	12	29	10595	3.7	395	12	19	11413	406	2	11908	430
	1107375	KENTUCKY	9	9	12081	3.6	427	8	47	12514	457	1	13405	487
	1110117	KENTUCKY	20	29	11471	3.8	429	20	10	11726	427	1	10983	405
	1120027	OHIO	1	1	10850	3.4	364	1	20	10150	357	1	13887	496
		KENTUCKY	96	110	12309	3.6	439	94	26	11796	434	1	11315	425
	1136723	KENTUCKY	55	63	12193	3.8	461	54	23	11762	432	1	11028	415
	1139162	KENTUCKY	3	3	10480	3.3	349	2	10	12090	440	1	9505	347
	1189113	KENTUCKY	63	79	11142	3.6	404	63	23	12204	450	1	11589	430
	1218293	PENNSYLVANIA	1	1	14380	3.6	516	1	25	13160	462	1	14519	517
		OHIO	4	5	13598	3.5	467	4	15	12135	434	1	14053	509
		ILLINOIS	1	2	16540	4.1	677	1	11	14695	583	1	13418	530
		KENTUCKY	86	109	13102	3.6	472	80	16	12003	437	1	11363	419
	1232049	KENTUCKY	24	31	11199	3.9	437	22	18	11933	437	1	11502	424
	1237270	KENTUCKY	17	19	11306	3.7	415	15	17	11946	441	1	10612	411
JER.	400954	KENTUCKY	29	69	6635	5.2	341	11	6	7023	351	2	7512	367
	409653	OHIO	1	1	7050	5.7	404	1	6	8810	484	1	7565	449
		KENTUCKY	87	198	6682	5.1	340	30	7	6960	357	2	7617	388
	434226	WISCONSIN	1	1	8580	5.2	448							
		KENTUCKY	104	251	7282	5.2	377	35	8	7707	396	2	7455	380
		TENNESSEE	1	3	6630	6.1	405							
		OKLAHOMA	1	2	8885	5.2	460							
	439605	KENTUCKY	1	1	4350	5.6	242							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREEO	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY NO.	AV. MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
	441296	KENTUCKY	4	8	7943	5.1	396	1	17	7750	384	1	7957	401
	445431	INDIANA	1	3	11143	5.5	614							
		KENTUCKY	97	230	6994	5.1	352	35	9	7147	366	2	7327	378
		TENNESSEE	2	2	8740	5.3	463	1	7	9190	495	1	7652	427
	445848	KENTUCKY	4	7	6778	5.2	351							
	450024	KENTUCKY	30	65	7550	5.3	395	15	10	7919	414	2	7408	378
	464969	KENTUCKY	15	45	6849	5.2	351	5	8	7414	357	3	7551	371
	465365	KENTUCKY	10	26	6748	5.4	365	2	7	7774	377	3	7670	382
	465861	WEST VIRGINIA	1	5	7074	5.3	378							
		KENTUCKY	12	36	7566	5.4	408	4	10	6966	357	2	6879	357
	472827	KENTUCKY	11	19	5838	4.9	286	7	16	7234	364	2	7065	349
	474745	KENTUCKY	4	4	7133	5.3	370	3	12	7053	376	1	6366	358
	476144	WEST VIRGINIA	1	2	6895	5.6	383							
		KENTUCKY	36	57	7054	5.1	362	20	17	7662	383	2	8192	411
		MISSISSIPPI	1	1	9670	4.9	475	1	43	9400	422	1	10737	511
	476577	KENTUCKY	7	18	6668	5.0	330	1	19	7745	393	2	7723	391
	477399	KENTUCKY	11	18	7237	5.2	376	6	8	8808	444	2	7903	405
	478187	SOUTH CAROLINA	1	1	8500	5.3	448							
		KENTUCKY	22	45	6731	5.2	347	6	9	7554	390	2	7462	381
	485194	KENTUCKY	11	17	7270	5.3	380	10	19	8420	399	1	8013	400
	489191	FLORIDA	3	4	9280	4.6	431	3	17	9317	429	1	8894	427
		KENTUCKY	25	37	7531	5.4	401	20	10	7852	400	1	7960	416
	499464	KENTUCKY	6	10	5433	5.0	277	1	8	6750	353	1	6714	358
	509683	KENTUCKY	2	7	8428	5.5	460	2	7	9060	459	2	8459	429
	519827	KENTUCKY	5	5	8280	5.0	408	3	19	8957	391			
	523302	KENTUCKY	1	4	8633	5.7	490	1	20	8937	400	2	7816	375
	525627	GEORGIA	1	1	8890	5.0	446	1	13	8160	439	1	9047	477
		FLORIDA	1	1	10860	5.0	546	1	18	9920	446			
		KENTUCKY	38	46	9259	4.9	454	28	16	8086	414	1	7900	409
	526397	OHIO	7	7	8970	4.7	422	5	14	8222	411	1	7837	393
		FLORIDA	5	6	7610	5.0	379	5	39	8290	428	1	7695	412
		KENTUCKY	41	45	7630	5.1	385	28	14	7667	386	1	7826	404
		TENNESSEE	1	1	8600	5.6	483	1	11	9030	492			
	526963	KENTUCKY	6	7	7493	5.2	385	5	12	9303	441	1	8636	430
	529754	FLORIDA	3	3	6910	5.5	380	3	17	6457	408			
		KENTUCKY	55	70	7551	5.0	379	36	13	7785	396	1	7967	410
		MISSISSIPPI	1	1	5750	5.2	300	1	35	9340	410			
	534585	OHIO	1	1	6320	4.9	311	1	5	5590	312			
		MISSOURI	1	1	7380	6.6	484	1	1	8380	469	1	7434	396
		FLORIDA	2	3	7460	5.6	413	2	30	7850	421	1	7695	412
		KENTUCKY	13	14	7863	5.2	406	10	12	8109	420	1	7831	400
	535747	KENTUCKY	2	2	3430	4.0	141	2	15	4320	218	1	5744	275
	537614	KENTUCKY	5	6	8180	5.1	416	3	9	8183	416	1	7641	382
	551881	KENTUCKY	13	24	8108	4.9	393	13	13	8143	412	1	8490	438
B. S.	62078	OHIO	1	1	7980	4.0	322	1	2	8240	329			
		KENTUCKY	177	20	9775	4.2	411	8	8	10518	423	2	10342	414
		LOUISIANA	1	3	9935	3.8	378							
	64208	KENTUCKY	5	7	8917	4.0	346	3	5	8997	389	1	8832	365
	71276	KENTUCKY	9	11	10383	4.4	456	4	10	10005	413	1	9862	401
	85917	KENTUCKY	5	11	9028	4.1	393	2	16	10500	404	2	10617	411
	101197	KENTUCKY	22	43	9886	4.3	422	15	9	10471	415	2	10341	410
	105252	KENTUCKY	3	3	10033	3.9	393	2	2	6280	276			

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
	106210	KENTUCKY	2	3	13393	4.0	525	2	10	12383	470	2	12497	485
	106313	NEW YORK	1	1	11480	4.5	515	1	21	12560	538	1	11587	495
		OHIO	1	1	15290	4.3	651							
		KENTUCKY	2	2	12310	3.7	451	2	15	11435	445	1	11702	458
	106841	KENTUCKY	3	4	9938	4.1	407	1	10	11860	502	1	11380	461
	107163	KENTUCKY	2	2	9255	4.2	380	2	15	11180	437	1	11702	458
	112325	KENTUCKY	4	8	10920	4.0	441	3	11	12000	485	1	10980	440
	113931	OHIO	1	2	12425	3.5	439							
		KENTUCKY	5	7	9715	4.0	386	4	7	10679	415	2	11238	444

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	AV. RECORDS NO.	YEARLY HERD NO.	MILK LB.	AV. FAT LB.
001	GUER	342897	TENNESSEE	2	2	7185	4.8	343								
		356498	TENNESSEE	5	12	5600	4.9	271								
		369042	TENNESSEE	7	14	7852	4.7	365								
		377533	TENNESSEE	2	4	5180	5.3	270								
		384672	TENNESSEE	2	4	7049	4.8	331								
		405545	TENNESSEE	11	21	7800	4.6	358								
		432229	TENNESSEE	1	2	10100	4.4	444	1	4	9215	465	1	9723	427	
		444011	TENNESSEE	1	1	5180	4.4	230								
		447170	TENNESSEE	3	4	6965	5.0	347								
	HOL.	945742	VIRGINIA NORTH CAROLINA TENNESSEE	35 1 4	102 5 6	12997 15578 12051	3.4 3.6 3.7	442 567 440	8	18	12945	458	2	12852	464	
		951402	TENNESSEE	3	3	7950	3.9	307								
		954382	WISCONSIN VIRGINIA FLORIDA TENNESSEE	1 1 1 10	4 1 1 14	13958 13190 7890 11458	3.2 4.3 3.5 3.9	451 563 277 446	1	11	10755	377	3	10584	374	
		989934	TENNESSEE	3	5	9183	3.8	351								
		1030848	WISCONSIN IOWA KENTUCKY TENNESSEE	2 1 1 11	6 1 1 30	13028 14180 16840 12252	3.8 3.2 3.4 3.6	492 459 574 444	2 1	10 2	13340 10060	509 350	2 1	13741 5134	517 194	
		1031424	NEW YORK VIRGINIA FLORIDA TENNESSEE	1 3 1 11	1 3 1 13	13710 10180 13870 10812	4.1 4.1 2.9 4.0	568 419 405 427	1 3 1	8 16 15	12110 12003 11050	437 440 376		1 1 1	11630 10202	444 362
		1072327	VIRGINIA FLORIDA TENNESSEE	1 1 1	1 1 1	17320 11990 13020	3.6 3.8 4.3	620 456 563	1 1	24 14	11150 10220	416 339		1	10202	362
		1075169	VIRGINIA	1	1	10630	4.1	437	1	17	12110	448				
		1100304	TENNESSEE	3	6	11228	3.6	404								
		1112543	TENNESSEE	7	8	13559	3.7	503								
		1174330	VIRGINIA	2	2	12070	3.8	453	2	16	12020	447	1	12524	472	
		1185325	IOWA	8	8	13233	3.7	488								
		1235734	FLORIDA TENNESSEE	1 1	1 1	11090 10420	3.6 4.0	399 420	1	15	11230	376	1	10202	362	
JER.	GUER	425624	TENNESSEE	2	9	5997	5.3	316								
		426756	TENNESSEE	7	14	7195	5.1	361								
		448751	TENNESSEE	6	11	6194	5.2	317								
		451409	KENTUCKY TENNESSEE	1 5	1 13	6490 6174	5.0 4.9	324 298								
		472615	TENNESSEE	22	48	6831	5.1	345	1	30	7280	368	1	7586	382	
		481791	TENNESSEE	9	21	6489	4.9	320								
		518895	TENNESSEE	1	1	8580	4.2	361								
		524961	TENNESSEE	1	1	10280	5.0	517	1	22	7990	393	1	7270	362	
		535429	TENNESSEE	7	12	8387	5.3	442	1	10	8960	468	1	7292	419	
		550782	TENNESSEE	5	5	8568	5.4	467	3	17	8467	429	1	7277	381	
		556755	TENNESSEE ALABAMA	7 2	7 2	7047 5645	5.4 5.7	372 320	4 2	79 31	8793 5925	436 298	1 1	6747 6475	375 335	
002	GUER	311109	TENNESSEE	4	11	5890	4.5	262								

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUP 0 BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		AV. FAT LB.
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	NO.	RECORDS LB.	
	315417	ALABAMA	1	4	7393	5.7	421	1	39	9820	468	1	10529	483
	352579	TENNESSEE	10	15	7135	4.9	344							
		ALABAMA	3	14	8983	5.1	452							
		MISSISSIPPI	1	4	5115	4.5	230							
		TEXAS	1	1	9540	4.8	460							
		CALIFORNIA	1	1	8780	5.0	441							
	365831	TENNESSEE	1	2	5210	4.7	246							
	366180	NORTH CAROLINA	1	2	6945	4.9	338							
		KENTUCKY	1	4	7663	5.1	390	1	14	8503	378	4	9453	393
		TENNESSEE	5	5	9680	4.9	470	3	34	8097	379			
		ALABAMA	3	7	7412	4.8	354							
		MISSISSIPPI	1	2	9190	5.1	460	1	6	8205	372	2	7331	363
	376594	TENNESSEE	1	1	5390	5.6	302							
	382641	TENNESSEE	2	2	7370	5.5	405	1	23	8710	409			
	401460	TENNESSEE	3	5	7643	5.3	408	2	12	9348	435	1	5842	308
		CALIFORNIA	1	3	10317	5.2	542							
	415399	TENNESSEE	7	13	6759	5.1	341	1	41	7300	348			
		ALABAMA	2	8	9103	4.7	424							
	423205	TENNESSEE	3	4	6647	4.0	265	1	23	8740	416			
	430370	TENNESSEE	5	6	6539	5.2	330							
	434495	TENNESSEE	1	3	11220	4.9	550							
	438084	TENNESSEE	4	5	8378	5.1	428	3	19	9457	446			
	439808	TENNESSEE	2	3	5618	4.6	251							
	445041	TENNESSEE	2	5	9073	5.0	451							
HOL.	850633	TENNESSEE	8	20	11516	3.5	397							
	889259	TENNESSEE	6	18	11221	3.7	407							
	913357	MARYLAND	1	1	12370	3.1	389	1	4	11020	436			
		FLORIDA	1	1	10060	2.9	292	1	14	10350	350	1	10202	362
		KENTUCKY	1	3	12153	3.6	433	1	6	10483	394	3	10254	372
		TENNESSEE	8	21	11057	3.7	406							
	943046	TENNESSEE	1	1	8836	3.7	325							
	1004745	TENNESSEE	2	10	12222	3.7	454							
	1009590	TENNESSEE	9	26	12197	3.5	422							
	1036978	TENNESSEE	2	7	13842	3.4	471							
	1065180	FLORIDA	1	1	11920	2.8	330	1	14	10220	348	1	10202	362
		KENTUCKY	1	1	15150	3.3	502	1	6	11010	394	1	10311	366
		TENNESSEE	8	18	11360	3.7	417							
	1078212	TENNESSEE	6	9	10171	4.0	400							
	1085652	TENNESSEE	6	15	12499	3.6	444							
	1111140	TENNESSEE	7	9	11814	3.6	423							
	1112083	TENNESSEE	2	3	13083	3.7	480							
	1116280	TENNESSEE	1	2	13780	3.8	516							
	1135827	TENNESSEE	1	1	10560	3.9	415							
	1149693	VIRGINIA	1	1	14270	3.4	479	1	24	11280	422			
		TENNESSEE	6	9	11813	3.6	416							
	1235082	VIRGINIA	1	1	14510	3.3	476	1	17	11830	445	1	12524	472
JER.	389881	TENNESSEE	8	11	6371	5.1	322							
	396491	GEORGIA	1	4	7158	5.4	384	1	11	8650	433	4	7055	357
		FLORIDA	1	2	7835	5.3	415	1	85	7365	376	2	7347	372
		KENTUCKY	2	3	7065	5.0	401	1	2	7080	396			
		TENNESSEE	54	137	7770	5.1	400							
		ALABAMA	1	4	8710	4.7	405							
		MISSISSIPPI	1	6	7767	4.8	372	1	26	7038	375	3	6548	333

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO. OAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
	450150	TENNESSEE	1	2	6070	5.5	335							
	453138	TENNESSEE	1	1	5640	5.0	279							
	454150	TENNESSEE	3	9	6428	5.6	358							
	456165	KENTUCKY TENNESSEE MISSISSIPPI	3 22 1	4 53 4	5313 6350 6690	5.3 5.4 5.2	284 342 345							
	457423	KENTUCKY TENNESSEE	1 15	4 32	10000 6655	5.3 5.5	531 364	1	3	9395	449			
	461093	TENNESSEE	7	16	7115	5.2	367	1	3	8602	406			
	461368	TENNESSEE	11	25	6192	5.2	322	1	40	7810	416	1	6747	375
	463756	TENNESSEE	5	8	9281	4.9	453	3	51	8115	414			
	463954	TENNESSEE	2	3	6195	5.4	339							
	467286	KENTUCKY TENNESSEE	1 5	2 15	5950 6563	5.2 5.3	308 354							
	467685	TENNESSEE	3	9	7671	5.2	406							
	468028	TENNESSEE	10	30	8019	5.0	396	3	2	8220	432			
	472181	MINNESOTA MISSOURI KENTUCKY TENNESSEE	1 17 1 3	1 54 1 3	6050 8438 7360 6130	4.7 5.2 4.6 5.2	284 434 335 320	1 4 1 1	10 6 18 40	6810 7519 9020 7650	349 400 408 419	1 2 1	9875 7974 9450	361 411 445
	477990	TENNESSEE	6	12	7440	5.3	394							
	478082	TENNESSEE ALABAMA	7 1	14 1	7281 4030	5.0 5.0	361 200							
	481978	TENNESSEE	4	6	7026	5.1	357	1	5	6390	326			
	485008	TENNESSEE	25	61	6835	5.3	358	2	41	8461	435	1	9145	362
	493513	TENNESSEE	1	1	5040	4.3	219							
	493979	TENNESSEE	1	1	1980	5.2	103	1	2	5660	243			
	500823	TENNESSEE	11	23	6134	5.4	329							
	508599	TENNESSEE	2	2	6975	4.9	326	2	27	7495	380			
	518310	KENTUCKY TENNESSEE	1 10	5 21	8658 7031	5.4 5.6	465 390	1	24	8335	449			
	518416	TENNESSEE	4	4	7613	5.1	383	3	38	8430	404	1	7183	343
	518978	TENNESSEE	4	7	6953	5.4	377							
	523798	FLORIDA	1	1	4630	5.0	233	1	45	7070	347	1	6377	296
	526137	TENNESSEE	1	2	7145	5.0	355	1	38	7060	330			
	529177	KENTUCKY TENNESSEE	1 1	1 1	9430 5810	4.6 5.3	432 307	1 1	18 12	8910 7550	402 407	1 1	9450 8426	445 446
	554298	TENNESSEE	2	2	6490	5.5	359							
	556839	TENNESSEE	4	4	7293	5.4	390	2	32	8330	426			
	563212	KENTUCKY TENNESSEE	1 2	2 2	8630 8095	5.6 6.1	480 489	1 2	12 9	8180 9230	402 493	1 1	10464 7292	483 419
8.S.	104455	TENNESSEE	1	1	7380	5.4	399							
	109954	INDIANA	2	3	14005	4.0	547	2	3	13340	533	1	9243	364
	111847	ALABAMA	1	1	8060	4.1	330							
	116587	TENNESSEE ALABAMA	1 1	1 1	14120 10310	4.4 3.4	625 347							
003 HOL.	1022601	VERMONT MASSACHUSETTS NEW YORK NEW JERSEY PENNSYLVANIA	14 2 382 1 2	19 3 581 1 3	10900 12853 11832 13710 13880	3.6 3.8 3.6 3.7 3.6	392 476 424 508 492	14 2 279 1 2	25 77 21 12 12	12691 15063 12515 15110 13045	473 580 453 563 476	1 1 1 1 2	12607 13914 12542 12938 12606	463 538 453 477 475

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO		
								NO.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
		NORTH CAROLINA	1	1	13840	3.5	487							
		SOUTH CAROLINA	1	1	6610	3.3	216							
		TENNESSEE	4	7	10920	3.6	385							
	1086776	VERMONT	1	1	13160	4.2	546					1	13287	491
		NEW YORK	3	3	10623	3.6	389							
		NEW JERSEY	1	4	10850	3.5	375							
		PENNSYLVANIA	33	77	10811	3.7	401	33	12	12049	456	2	12076	456
		OHIO	3	4	12458	3.4	416	3	11	11493	407	1	13113	453
		INDIANA	17	34	12514	3.7	462	16	6	12908	483	2	12267	458
		ILLINOIS	9	20	12099	3.6	436	9	13	13209	489	2	12617	469
		MICHIGAN	8	14	10852	3.7	393	8	17	12551	449	2	11968	431
		WISCONSIN	10	22	11057	3.7	407	10	11	12255	431	2	11742	420
		DELAWARE	1	1	7250	4.0	294	1	16	12190	427	1	13494	467
		MARYLAND	1	2	13025	3.5	458	1	10	14415	503	1	12960	470
		FLORIDA	1	3	11103	3.7	405	1	4	6920	287	1	6900	279
		KENTUCKY	1	1	12750	3.8	489							
		TENNESSEE	11	12	12147	3.6	434	1	14	14150	505			
		LOUISIANA	1	2	10715	4.0	429							
	1102861	TENNESSEE	17	23	11517	3.7	420							
	1114612	TENNESSEE	7	12	11219	3.6	393							
JER.	409600	TENNESSEE	18	37	5556	5.1	282							
		MISSISSIPPI	2	3	5855	5.5	310							
	422752	ALABAMA	1	2	8610	5.3	451							
		MISSISSIPPI	5	7	5659	5.6	316							
	424779	MISSOURI	1	1	9710	5.1	496							
		KANSAS	1	1	7620	5.8	439							
		KENTUCKY	4	7	7353	5.0	363	2	7	7038	345			
		TENNESSEE	29	97	6802	5.0	343							
	439350	KENTUCKY	3	3	7563	5.3	401							
		TENNESSEE	30	83	6014	5.2	311							
	442043	KENTUCKY	4	7	5576	5.5	304	3	7	6158	307	2	8944	424
		TENNESSEE	15	35	6028	5.3	320							
	460754	KENTUCKY	2	3	3935	5.5	214	2	8	4398	223	1	5003	253
		TENNESSEE	4	10	5803	5.2	303							
	480233	TENNESSEE	15	46	6734	5.2	352							
	503806	TENNESSEE	6	14	7185	5.1	367							
	535241	TENNESSEE	1	1	2830	5.5	156							
	538727	TENNESSEE	7	12	7429	4.9	367	1	10	3660	185	1	7096	351
	543758	TENNESSEE	4	6	7576	5.0	371	3	41	6595	335	1	7096	351
	554569	TENNESSEE	1	1	4230	5.1	215							
	554570	TENNESSEE	3	3	9553	5.1	483	2	53	8225	428	1	8851	456
	565086	ALABAMA	1	1	1830	4.5	61	1	11	4310	182			
004	GUER	374685	TENNESSEE	3	5	7135	4.8	339						
	HOL.	852407	TENNESSEE	2	3	8143	3.4	278						
	JER.	361315	TENNESSEE	49	92	7369	5.4	395						
	384611	MAINE	1	1	6450	4.7	304							
		TENNESSEE	22	38	6864	5.3	367							
		ALABAMA	1	4	7388	5.1	379							
	392201	TENNESSEE	5	12	7432	4.9	368							
	404340	GEORGIA	1	1	6100	4.8	290							
		TENNESSEE	18	26	5874	5.1	303							
	424893	TENNESSEE	4	8	8185	4.7	381							
	448388	TENNESSEE	3	3	6137	4.9	304							
005	GUER	243707	FLORIDA	1	2	7265	4.3	308						
	HOL.	841496	TENNESSEE	5	5	10922	3.5	378						
	JER.	378561	TENNESSEE	2	3	7463	5.1	378						

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK TEST			FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
					LB.	PCT.			NO.	RECORDS	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
394638		TENNESSEE	11	28	8403	5.0		418	1	2	9123	479	1	9145	362
		MISSISSIPPI	2	7	6519	5.3		341	1	42	6795	350	3	6537	334
428347		TENNESSEE	3	7	6355	4.1		264							
		MISSISSIPPI	1	1	3880	5.2		201							
481508		TENNESSEE	1	2	8750	5.2		458							
		MISSISSIPPI	1	1	6480	5.4		353							
484418		MISSISSIPPI	1	7	8169	5.1		421	1	22	7124	362	2	6481	330

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	Breed	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
001	GUER	262467	ALABAMA	3	5	7847	4.3	341							
		347845	ALABAMA	3	12	7481	4.0	301							
		350940	VIRGINIA	1	1	6430	5.1	330							
			NDRTN CAROLINA	1	3	8493	4.5	387							
			GEORGIA	1	3	5553	5.0	276							
			ALABAMA	5	11	6645	4.6	305	2	2	6430	320			
		358912	PENNSYLVANIA	1	4	6773	5.3	361	1	8	9453	449	3	8618	425
		369192	ALABAMA	3	5	6618	4.8	320							
		389320	ALABAMA	2	4	6309	5.2	325	1	8	5410	243	1	5472	259
		404533	ALABAMA	1	3	3623	4.2	153							
	JER.	413632	ALABAMA	1	1	6320	4.4	276							
		441128	FLORIDA	1	1	5060	5.5	278	1	30	6770	315	1	7717	363
			ALABAMA	1	4	7510	4.7	357							
		406501	MISSOURI	3	8	7944	5.2	412	1	8	8525	451	1	7968	400
			NORTH CAROLINA	1	2	5645	5.1	287							
			FLORIDA	1	1	7170	4.6	331							
			ALABAMA	9	22	6322	4.9	301							
		440007	SDUTH CAROLINA	1	3	6933	6.1	422							
			ALABAMA	5	15	6980	5.2	361	1	1	10690	523			
		450799	ALABAMA	9	20	6775	5.1	347							
		454149	ALABAMA	8	19	6305	4.7	298					1	8949	411
		457678	MISSDURI	9	27	7353	4.9	360	1	6	7392	398	2	6834	362
			ALABAMA	17	37	6264	4.7	293	1	2	6645	361			
			MISSISSIPPI	1	1	5510	4.4	242							
		460914	ALABAMA	4	9	7073	4.8	342					2	10148	439
		473063	ALABAMA	2	2	5695	5.5	310							
		474118	ALABAMA	8	12	5849	4.7	274							
		475447	ALABAMA	15	24	6895	4.9	330	3	34	7137	346	1	7783	355
		478704	ALABAMA	6	15	7683	4.4	335							
002	JER.	455175	ALABAMA	3	5	7067	4.8	340	1	1	8680	400			
		489547	ALABAMA	4	10	6495	5.0	324							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAS.	CONTEMPORARY NO. RECORDS	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
001	GUER	409291	MISSISSIPPI	3	4	5143	4.8	249							
		420297	MISSISSIPPI	2	4	6812	5.1	343	1	9	7775	350			
			NEW MEXICO	2	2	8075	4.7	383	2	25	9980	482			
002	GUER	381572	MISSISSIPPI	1	1	5380	4.7	254	1	2	6960	335	1	7314	316
		437792	MISSISSIPPI	3	3	7690	4.5	346							
		460333	MISSISSIPPI	11	21	8086	5.0	402	8	36	8282	400			
		460565	MISSISSIPPI	1	1	9550	3.7	349	1	13	8920	403	1	8655	385
		488533	MAINE	4	6	7479	4.7	344	4	5	7271	371	2	8025	381
		509342	MISSISSIPPI	1	1	5330	4.8	257	1	61	6530	313			
	HOL.	1064346	MISSISSIPPI	1	1	9370	4.0	372	1	3	13350	491			
		1064348	MISSISSIPPI	1	1	10990	3.0	330	1	10	10920	370			
		1135396	MISSISSIPPI	3	3	12077	4.0	477	3	9	12210	427	1	11238	437
		1192892	WISCONSIN	1	3	16590	3.6	599	1	12	14055	480	2	12143	440
			MISSISSIPPI	2	3	11703	3.7	431	2	10	11265	398	1	9925	375
		1222009	MISSISSIPPI	6	6	11797	3.4	399	6	25	10433	371	1	10346	376
		1225715	MISSISSIPPI	2	2	13710	3.6	490	2	15	12200	454	1	11870	449
	JER.	412887	TENNESSEE	1	1	6470	5.6	360							
			MISSISSIPPI	1	3	7913	4.9	388							
		417749	TENNESSEE	1	3	6213	5.3	331							
			MISSISSIPPI	13	26	6745	5.0	338	6	14	7295	358	2	6069	303
		419237	MISSISSIPPI	17	33	6734	4.7	320	8	13	6804	331	1	5723	273
			LOUISIANA	1	2	7885	5.2	406							
		420717	ALABAMA	1	2	5105	5.5	280							
			MISSISSIPPI	12	29	6146	5.1	312	4	16	6607	322	1	5581	270
		427425	MISSISSIPPI	3	6	7401	5.0	372	2	40	5749	288	1	6159	298
		444366	MISSISSIPPI	6	12	5661	5.3	296	5	20	5953	288	1	5992	305
		455648	FLORIDA	1	1	6680	5.3	353	1	146	7040	345	1	6998	350
			ALABAMA	2	3	6483	4.7	297							
			MISSISSIPPI	13	28	6126	5.0	305	4	22	6121	298	1	5657	287
		466296	FLORIDA	1	1	7190	4.4	313							
			MISSISSIPPI	33	61	7215	4.7	336	22	24	7138	343	1	6700	313
		474914	ALABAMA	1	1	3800	4.1	157							
			MISSISSIPPI	8	13	6359	4.9	308	2	49	6100	313	1	6159	314
		482207	OHIO	2	6	8288	4.6	381	2	3	8409	421	1	7772	404
			KENTUCKY	1	1	8920	4.3	384	1	9	11820	609			
			ALABAMA	1	1	5470	5.3	288							
			MISSISSIPPI	8	14	6794	4.6	310	7	16	6920	333	1	5550	267
		506074	MISSISSIPPI	9	15	6559	5.1	335	8	17	6881	339	1	6737	315
		527462	MISSISSIPPI	9	12	6956	4.8	333	5	22	8024	409	1	7292	350
		535422	MISSISSIPPI	16	21	6821	4.9	337	11	22	7958	371	2	8250	387
		537731	FLORIDA	1	2	6065	5.3	320	1	130	8950	428	2	8322	398
			ALABAMA	1	1	7420	5.1	378	1	19	7290	358			
			MISSISSIPPI	3	7	5818	5.2	289	2	37	5573	293	1	8219	398
			TEXAS	1	2	5870	5.2	306	1	33	7490	393			
		539111	MISSISSIPPI	4	7	6544	5.1	334	2	16	6743	347	2	8404	433
		541470	MISSISSIPPI	3	4	4393	5.1	220	2	59	7450	361			
		551630	MISSISSIPPI	5	7	6154	5.1	314	3	28	7400	375	1	7685	393
		554535	MISSISSIPPI	4	6	6408	5.2	331	2	36	6815	335	1	7467	354
		555596	MISSISSIPPI	3	3	5600	5.0	275	2	52	7245	359			
		558752	MISSISSIPPI	4	5	6343	5.3	355	4	11	6045	331			
			TEXAS	1	1	11760	5.2	607	1	147	9770	515			

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY RECORDS NO.	AV. MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
		563936	MISSISSIPPI	5	5	5816	5.0	288	2	59	7470	363			
		564830	MISSISSIPPI NEW MEXICO	1 1	1 1	7200 7630	6.2 5.6	449 424	1 1	12 7	6700 7600	351 439			
003	8. S.	115573	MISSISSIPPI	1	3	11667	4.1	480							
	JER.	382920	NORTH CAROLINA	1	3	6760	4.9	331							
		440005	FLORIDA MISSISSIPPI	1 3	4 5	9373 8338	4.9 4.6	461 379							
		454857	MISSISSIPPI	3	4	6703	4.8	323							
		460753	MISSISSIPPI	4	9	4082	5.4	216	2	5	5025	263	1	5733	294
004	JER.	404105	ALABAMA MISSISSIPPI TEXAS UTAH	6 12 1 1	23 21 1 1	7217 6092 7680 8630	5.0 5.3 5.7 5.3	365 326 435 453							
		415739	FLORIDA ALABAMA MISSISSIPPI LOUISIANA	1 1 8 1	1 1 15 2	9470 5040 6237 6595	4.6 4.4 5.4 5.2	437 220 334 339	1	29	6790	353	1	6562	336
		425622	NEW JERSEY KANSAS VIRGINIA NORTH CAROLINA GEORGIA FLORIDA TENNESSEE ALABAMA MISSISSIPPI LOUISIANA TEXAS	1 1 1 1 2 1 3 3 9 1 1 1	2 2 2 2 3 4 9 3 21 2 1	8625 4740 5870 5335 4763 6120 6390 5793 5890 4470 5930	5.1 4.4 5.3 5.4 5.3 5.0 5.1 4.9 5.3 6.0 5.1	434 208 306 286 241 306 324 289 313 265 305			8347	426			
		458890	MISSISSIPPI	1	2	9320	4.7	435							
		462856	FLORIDA ALABAMA MISSISSIPPI	1 1 10	1 2 27	6200 8510 6057	4.4 5.5 5.7	275 468 342	3	35	5522	287	1	6762	332
		473412	ALABAMA MISSISSIPPI	1 3	1 3	9090 6867	4.7 5.4	432 361	1 3	19 7	7200 5397	355 272			
		485089	MISSISSIPPI	2	2	7795	5.1	394	1	49	10220	447	1	8251	373
		490420	VIRGINIA GEORGIA FLORIDA ALABAMA MISSISSIPPI LOUISIANA TEXAS	1 1 2 3 14 2 1	2 1 4 3 30 2 1	8885 7440 6423 5083 6309 6180 7830	5.3 5.4 5.6 5.3 5.2 4.6 5.7	467 404 352 266 330 280 444	2 2 2 3 1 1 1	26 36 17 8 147	9380 6900 6462 8710 9800	454 373 334 450 516	2 1 1 1	7690 6894 6268 6573	380 370 322 349
		492309	FLORIDA MISSISSIPPI	4 10	14 24	7227 7068	5.1 5.1	370 359	2 3	36 23	7665 7422	393 389	2 2	7816 7963	401 377
		502868	DELAWARE FLORIDA MISSISSIPPI	1 1 3	1 1 9	5410 6080 7840	5.1 4.1 4.8	273 248 378	1	2	7130	315			
		509187	VIRGINIA FLORIDA ALABAMA MISSISSIPPI	1 1 1 7	1 3 1 15	10670 9500 10130 7261	4.5 4.9 5.3 5.3	481 463 532 388	4	23	7272	403	1	6496	339
		513415	MISSISSIPPI LOUISIANA TEXAS	2 1 1	5 2 1	6048 4780 8020	6.0 5.0 5.5	374 238 440	1 1 1	30 147	6210 9800	319 516	1	6682	346
005	JER.	463220	MISSISSIPPI LOUISIANA	2 4	2 9	6695 5557	5.2 5.2	346 292	1 1	12 11	10170 6177	441 322	1	8382	400
		501232	MISSISSIPPI	5	6	4817	5.0	247	1	11	5835	301	1	4807	245
		510763	MISSISSIPPI	2	3	6008	5.3	314							
		514426	MISSISSIPPI	1	1	6600	5.0	331	1	2	6960	355			
006	GUER	233508	INDIANA FLORIDA MISSISSIPPI	1 4 1	2 11 3	7845 7366 6230	5.3 4.7 4.5	413 339 284	2	172	6889	301	3	6854	307

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
	JER.	425627	MISSISSIPPI	4	6	5724	5.1	284	1	8	8740	439	1	7946	395
		464684	MISSISSIPPI	8	10	5966	4.7	278	1	5	5050	275			
		516445	MISSISSIPPI	4	7	6732	5.1	345	2	3	5965	310			
007	GUER	364939	ALABAMA	1	1	6300	4.7	294							
			MISSISSIPPI	1	1	5750	4.5	258	1	9	8220	375			
008	JER.	387629	MISSISSIPPI	9	12	5837	5.0	287							
		456755	TENNESSEE	1	7	6757	5.7	383							
			MISSISSIPPI	2	2	5220	5.2	271							
			TEXAS	1	3	9553	5.1	487	1	2	6607	329	1	7826	373
075	JER.	454746	KENTUCKY	6	12	7691	5.4	421	2	6	4725	248	1	6246	330
			TENNESSEE	25	71	5967	5.2	307							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO BREEO	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.		
								NO. OAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
001 GUER	271409	ARKANSAS	1	1	9520	4.7	444							
	310199	ARKANSAS	1	1	8180	4.8	390							
	360842	ARKANSAS	5	8	7590	4.5	343							
	409915	ARKANSAS	3	6	7819	4.9	371	1	8	8110	411			
	412423	MISSISSIPPI ARKANSAS	1 7	1 11	7370 6880	4.9 5.0	363 342					1	8077	395
	416980	ARKANSAS	3	4	6270	4.8	304	3	21	7990	381			
	464977	MISSISSIPPI	1	1	6760	4.6	310							
	464978	MISSISSIPPI ARKANSAS TEXAS	1 2 1	1 4 1	6700 6130 9650	5.2 4.9 4.3	351 299 419	1	35	8230	342			
HOL.	946851	NEW YORK	6	20	12888	3.5	432							
	1013193	ARKANSAS	1	2	14040	3.5	483							
	1025678	ARKANSAS	1	1	8670	4.0	344	1	116	9090	308	1	9058	306
	1042559	ARKANSAS	4	4	11725	3.7	429	4	77	11188	397	1	9058	306
	1129610	ILLINOIS ARKANSAS	4 7	4 10	11703 11410	3.9 3.5	457 399	4 4	17 68	11508 11240	428 400	1 1	11775 12437	439 444
	1239307	ARKANSAS	1	1	15400	3.4	528	1	18	12320	440	1	12470	448
	1281524	ARKANSAS	2	2	10485	3.7	389	2	26	10565	371			
JER.	399871	ARKANSAS ARIZONA	2 1	6 1	6637 7480	5.3 5.2	349 386							
	412430	ARKANSAS	2	3	5648	5.4	302							
	443950	ILLINOIS	1	1	5470	5.4	298							
	447268	MINNESOTA MISSOURI ARKANSAS	2 14 3	4 32 3	5597 6783 5830	5.3 5.2 5.7	292 355 337	2 2 1	6 5 1	7092 7431 6840	373 422 335	2 2	6430 7832	331 417
	447337	MINNESOTA MISSOURI ARKANSAS	1 13 6	4 37 9	7050 6282 7246	4.8 5.4 5.1	337 336 371	1	2	6763	329	3	6449	327
	448611	ARKANSAS	2	7	5944	5.7	338							
	450606	MISSOURI KANSAS	15 2	38 3	6565 5460	5.2 5.5	345 300	1	7	6590	339	1	5842	308
	455839	ARKANSAS	3	9	6974	5.4	376	1	27	6880	341			
	456610	ARKANSAS TEXAS	4 1	6 2	8448 8245	5.0 5.9	406 488	1 1	9 8	7460 11055	426 467	1	9919	421
	458296	ARKANSAS	3	3	7017	4.8	342	2	13	7085	373	1	6922	365
	463339	ARKANSAS	1	4	6588	5.3	349							
	474008	PENNSYLVANIA ARKANSAS	1 7	2 18	11725 5213	4.8 5.7	559 291	1	23	7300	395			
	496343	ARKANSAS	1	1	7210	5.1	370							
	497852	ARKANSAS	4	11	7638	5.0	381	2	12	5980	337			
	497853	ARKANSAS	4	6	5504	5.0	276							
	516857	ARKANSAS	3	7	6072	5.1	309							
	525601	ARKANSAS	1	1	6730	5.4	364	1	23	7320	396			
	540150	ARKANSAS	1	2	6180	5.4	331	1	30	6900	336			
	541512	KANSAS	1	1	5510	5.0	276	1	3	8550	455	1	8219	452
	542304	MISSISSIPPI ARKANSAS	1 6	2 8	6150 7145	4.7 5.4	290 383	1 6	27 16	6040 7395	278 388	1 1	5287 7924	249 409

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	Breed	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				AV.		
									NO.	RECORDS	MILK LB.	FAT LB.	RECORDS	MILK LB.	FAT LB.
		543973	ARKANSAS	2	2	7600	4.9	376	2	25	6475	322			
		556663	ARKANSAS	4	8	5687	5.3	307	3	18	7183	372	2	5963	349
M.S.H.		29840	ARKANSAS	2	2	7095	3.4	235	2	14	7795	294	1	9439	376
		35437	ARKANSAS	1	1	5840	4.0	232	1	27	6180	278			
		85898	MISSOURI	2	4	10055	3.6	353	2	19	9915	382	2	8674	344
			ARKANSAS	6	6	6273	3.8	236	6	17	6940	285	1	9538	375
		91522	ARKANSAS	2	2	8470	3.8	318	1	5	9000	345	1	9538	375

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERO		
									NO. OAS.	RECORDS NO.	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
001	GUER	320301	LOUISIANA	2	4	3654	4.0	148							
		332285	LOUISIANA	4	9	6954	4.7	329	3	151	7753	375	1	6282	301
		335139	LOUISIANA	3	14	7926	5.1	406	2	119	7928	375	2	6028	291
		336644	VIRGINIA LOUISIANA	1 1	4 4	6540 5483	5.3 4.9	343 266							
		341508	LOUISIANA	4	14	5380	4.8	256	2	48	7753	367	2	7391	350
		358738	INDIANA	1	3	7093	5.8	411	1	21	9065	480	2	9396	480
		363224	LOUISIANA	3	7	7587	4.5	340	1	63	8850	410	2	7391	350
		364223	LOUISIANA	6	10	6559	4.7	310	5	64	7438	355	2	5723	271
		370049	LOUISIANA	9	28	8029	4.8	388	5	123	7957	375	1	6148	297
		396701	NEBRASKA LOUISIANA	24 1	60 1	9098 9770	5.2 4.4	468 434	1	6	6910	316	1	6387	311
		400112	LOUISIANA	14	38	6833	4.6	315	9	67	7109	342	2	5988	288
		439041	LOUISIANA	4	13	6342	4.8	306	2	31	6923	352	3	6307	310
		443481	LOUISIANA	3	6	5774	4.9	283	1	40	7150	340			
		469531	LOUISIANA	1	2	3680	4.7	172							
		477214	LOUISIANA	1	1	7560	4.7	354	1	10	6670	328			
HOL.	HOL.	781635	LOUISIANA	2	6	9252	3.5	321	2	14	9137	332	3	8746	318
		830325	MAINE MASSACHUSETTS LOUISIANA	61 1 2	170 1 3	10139 10750 8863	3.6 3.5 3.5	359 377 309	14	7	10894	417	2	10821	412
		835399	LOUISIANA	5	14	9991	3.5	349	2	11	7620	302	5	7311	284
		842297	LOUISIANA	5	10	10128	3.6	361	4	8	8260	365	1	8613	372
		842737	LOUISIANA	2	4	8624	3.7	320	2	15	8255	318	1	7930	334
		863790	LOUISIANA	2	3	9308	3.8	347	2	9	9190	351	2	8649	321
		881760	PENNSYLVANIA MINNESOTA MARYLAND LOUISIANA	307 1 2 5	760 1 6 14	10941 9560 9582 8205	3.6 3.6 3.8 3.6	387 341 365 299	167	8	11015	410	2	10831	405
		947148	LOUISIANA	5	13	8702	3.5	301	4	13	9175	329	2	8677	308
		968377	KANSAS TEXAS	2 43	2 64	13885 11830	3.6 3.7	491 431	1 42	35 14	14320 12063	500 462	1 1	14780 11554	522 425
		979025	LOUISIANA	2	2	12150	3.7	450	2	26	12080	435	1	10595	350
		985718	LOUISIANA	3	8	9020	3.8	340	3	5	8831	287	3	6660	272
		1002424	LOUISIANA	3	3	8590	3.5	300	3	16	8130	303	1	8698	320
		1009211	LOUISIANA	11	33	9494	3.9	366	8	10	9076	346	2	8752	337
		1018213	IOWA	14	38	14193	3.5	498	14	8	14509	520	3	14411	509
		1032813	LOUISIANA	4	4	11083	3.4	381	3	20	9440	338			
		1037582	LOUISIANA	9	15	9400	3.5	325	8	12	8762	317	1	8504	313
		1039526	LOUISIANA	1	1	6170	3.6	224	1	11	10210	369			
		1056591	LOUISIANA	1	1	11510	3.2	366	1	18	9210	321	1	8164	290
		1143527	NEBRASKA	7	10	14019	3.7	517							
		1179407	VIRGINIA NORTH CAROLINA SOUTH CAROLINA GEORGIA	3 1 52 1	3 1 73 1	9807 14320 10881 16370	4.0 3.5 3.6 3.6	396 564 390 590	3 1 50 1	48 11 62 29	11980 11960 10747 12080	447 478 386 434	1 1 1 1	11772 9472 11332 10083	413 366 401 380
		1215556	SOUTH CAROLINA	21	25	11701	3.5	416	21	56	11918	428	1	11998	412

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				AV. YEARLY HERO		
								NO. OAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
JER.	413995	LOUISIANA	2	2	4355	5.1	230							
	414890	MISSOURI	5	11	7252	5.4	390							
		LOUISIANA	15	23	5615	5.0	282	2	11	6160	310	2	4894	243
	420006	LOUISIANA	3	5	6725	5.5	370							
	438493	LOUISIANA	3	5	7816	4.9	375	2	10	7524	390	1	6605	326
	441806	LOUISIANA	4	6	6066	5.3	323							
	452355	LOUISIANA	4	10	6166	5.3	324	3	16	7568	382	2	6996	359
	454003	LOUISIANA	9	17	6570	5.3	348	2	9	6685	329	1	7750	405
	462214	MISSISSIPPI	1	1	4990	5.7	282	1	17	6060	286			
		LOUISIANA	3	8	4748	5.1	234	2	21	6385	329	2	5639	286
	462218	FLORIDA	1	2	8280	4.8	395	1	54	9020	440	2	7069	361
		LOUISIANA	23	54	7014	5.1	354	10	14	6529	337	2	6310	306
	469407	LOUISIANA	4	7	4980	5.1	255							
	474562	LOUISIANA	5	6	5702	4.8	270	2	16	6795	338			
	480635	LOUISIANA	7	10	5841	5.0	290	5	14	7059	351	2	6813	356
	480644	LOUISIANA	5	9	7486	5.2	387							
	482789	LOUISIANA	6	11	5691	5.3	302	4	15	7513	369	2	4988	227
	484938	LOUISIANA	2	4	7694	5.0	361							
	486680	LOUISIANA	5	6	6835	5.2	354							
	491364	LOUISIANA	1	2	6250	5.8	359	1	4	7600	396	1	6442	343
	497585	LOUISIANA	2	2	5235	5.2	277	1	95	8030	414			
	507777	LOUISIANA	1	1	7100	5.6	398	1	57	8230	413			
	513164	LOUISIANA	4	4	5875	4.9	286	4	15	7388	360			
	518708	LOUISIANA	7	10	5902	5.0	294	3	14	7607	388			
	524043	LOUISIANA	1	1	6670	5.5	367							
	531131	LOUISIANA	1	1	6410	4.5	290							
	539192	LOUISIANA	5	13	5982	5.4	323	4	23	7111	358	3	6453	326
	553103	LOUISIANA	5	5	6128	5.1	316	5	76	7660	392			
	556125	LOUISIANA	1	1	6160	5.3	325							
	560074	LOUISIANA	1	1	7070	5.1	357	1	70	7220	389			
	567065	LOUISIANA	2	2	6880	5.2	359	2	30	8050	400	1	7412	392
002 JER.	411050	LOUISIANA	6	11	8086	5.1	414							
	429795	LOUISIANA	5	13	7290	5.2	379							

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD			
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT	
									• NO.	RECORDS	MILK	FAT				

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV. YEARLY HERD				
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	AV. FAT LB.	
HOL.		376525	KANSAS OKLAHOMA TEXAS	1 3 1	2 4 1	6850 5895 6510	4.6 4.8 4.7	311 292 303								
		412421	OKLAHOMA	3	4	8593	5.0	425	3	6	9267	466				
		417972	OKLAHOMA	1	3	8180	4.0	328	1	19	7220	314				
		453837	OKLAHOMA	1	1	6390	4.3	275	1	15	7130	347				
		867183	KANSAS OKLAHOMA	1 18	2 28	15985 12629	3.7 3.4	594 421	12	23	12163	440	1	11181	406	
		890370	KANSAS OKLAHOMA	2 11	6 22	11872 12618	3.6 3.3	424 412	7	13	16302	546	2	12059	401	
		922335	OKLAHOMA	2	3	9003	4.1	364	1	9	13530	476	1	10573	376	
		925950	ARKANSAS OKLAHOMA	1 6	1 11	11240 13824	2.8 3.4	311 462	1 6	29 11	4890 12508	206 446	1	11331	410	
		928353	OKLAHOMA	13	22	12735	3.5	442	10	19	13332	480	1	9651	368	
		991095	MISSOURI OKLAHOMA	1 13	1 28	16940 12834	3.4 3.4	576 435	10	10	14255	483	2	10650	390	
		1010939	OKLAHOMA	1	3	10213	3.7	378	1	9	11280	411	3	11082	405	
		1061909	OKLAHOMA	15	17	13264	3.6	475	15	13	13984	498	1	15207	535	
		1072333	OKLAHOMA	19	25	13765	3.5	485	18	71	14213	488	1	11967	405	
	JER.		441313	OKLAHOMA	2	2	7110	4.4	313	1	27	5960	298	1	7619	382
		454028	OKLAHOMA	10	19	6127	5.5	340	2	18	7762	387	2	7723	410	
	483234	OKLAHOMA	1	1	6060	4.4	268									
	497914	OKLAHOMA	1	1	7060	5.6	396									
	531263	OKLAHOMA	1	1	3560	5.1	180	1	10	6960	321	1	5799	237		
M. SH		23691	OKLAHOMA	2	2	6805	4.0	268	2	9	6420	239	1	4949	191	
	32746	MISSOURI	1	1	9260	4.3	398	1	22	9710	397	1	8033	331		

TABLE 16.--DAUGHTER-AVERAGE OF SIREs IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	305-DAY				CONTEMPORARY				YEARLY			HERD	AV. FAT LB.
						MILK LB.	TEST PCT.	FAT LB.	NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.				
001	HOL.	845079	WISCONSIN TEXAS	4 11	16 20	10120 11296	4.1 3.7	410 413	4 11	15 23	12157 12311	450 435	4 2	12168 8567	445 339			
		869940	TEXAS	5	16	12126	3.5	426	3	8	11114	412	1	10081	379			
		876957	TEXAS	1	1	13380	3.5	469	1	46	13760	469						
		879588	TEXAS	6	13	11133	3.3	361	4	25	11002	389	2	8344	333			
		1020034	TEXAS	24	32	12901	3.5	454	23	28	12884	450	2	8501	335			
		1115903	TEXAS	1	3	11700	3.4	392	1	14	11243	412	2	8344	333			
		1136825	TEXAS	8	10	13649	3.5	470	8	30	13559	466	1	9232	326			
		1150353	TEXAS	8	8	14629	3.4	489	8	39	13590	466						
		1179076	TEXAS	21	24	13025	3.5	452	21	29	12609	449	1	9062	364			
		1233390	TEXAS	10	10	14931	3.3	495	10	28	13117	447	1	11950	413			
	JER.	371760	TEXAS	15	38	8031	5.2	416	4	13	9021	459	1	7859	331			
		422626	TEXAS	1	3	8317	5.5	456										
		422886	TEXAS	24	69	7883	5.2	409	2	37	8730	452						
		437141	TEXAS	4	9	7266	5.0	361										
		460779	TEXAS	21	51	7728	5.0	391	6	30	7751	398	2	7534	354			
		464775	TEXAS	7	15	7465	5.2	389	1	4	8796	460						
		473218	OHIO IOWA TEXAS	20 1 16	21 1 36	7364 7920 8596	5.1 5.7 5.3	377 448 449	18 1 6	10 15 12	8565 8630 9106	414 421 469	1 1 1	8680 10279 8557	418 502 460			
		487638	TEXAS	22	38	7704	5.3	400	15	47	7878	409	1	7074	370			
		491129	TEXAS	2	3	5825	5.2	306										
		500213	TEXAS	21	46	7295	5.4	390	6	38	8464	438	1	8230	315			
		506200	TEXAS	10	22	8023	5.1	408	7	50	8275	425						
		513250	TEXAS	21	23	8924	5.1	453	21	52	7901	407	1	7074	370			
		567710	TEXAS	8	8	6344	5.3	336	8	70	7335	377						
		002	GUER	330712	TEXAS	14	25	7328	4.8	349	11	10	9831	418	2	9258	390	
				350490	TEXAS	5	10	7849	4.8	375	2	11	9148	380	2	8166	357	
				371444	TEXAS	9	17	8252	4.9	391	8	18	9299	418	2	8582	370	
				382019	TEXAS	1	1	4910	5.0	244								
				382421	TEXAS	31	73	7343	4.8	351	15	12	10157	412	2	9086	383	
				386849	TEXAS	22	59	7571	4.8	362	14	11	9064	392	2	8624	365	
				419512	MISSOURI TEXAS NEW MEXICO	4 6 2	7 13 5	6827 7335 9512	5.5 4.8 5.0	376 354 466	1 6 1	6 23 134	9500 9592 10530	460 407 478	3 2 2	9817 8813 10410	510 384 482	
445354	TEXAS			3	9	7945	4.9	385	1	12	9015	422	1	7706	349			
492482	TEXAS			1	1	9360	5.0	465	1	51	12150	538	1	11630	511			
HOL.	835403			IOWA TEXAS	1 25	1 57	13570 12140	4.0 4.0	543 489	23 11	11 11264	445	2 2	10119	400			
	857481	TEXAS	33	85	11380	3.8	426	24	13	10432	426	2	9903	404				
	886820	WISCONSIN KANSAS	5 2	13 5	13176 8803	3.4 3.8	438 334	5 9	13204	469	2	10849	380					
	925407	KANSAS TEXAS	3 69	6 130	11012 11639	3.7 3.9	409 449	2 65	6 16	9783 11484	354 453	2 2	10481 10950	373 427				
	963832	TEXAS	25	63	10287	4.0	409	22	11	10114	404	2	9267	373				
	991803	IOWA TEXAS	1 2	2 5	18625 14966	3.6 3.6	669 533	1 2	2 8	13625 14435	531 541	2 2	11936 12939	453 478				

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
		1031721	TEXAS	38	76	12270	3.9	473	38	15	11482	446	2	11001	418
		1045390	WISCONSIN	1	2	14540	3.7	545	1	11	13000	479	1	14159	518
			TEXAS	7	8	14723	3.8	553	7	13	13337	501	1	12277	411
		1159165	LOUISIANA	1	2	9095	3.2	268	1	14	6815	327	2	7036	345
JER.		393048	MISSOURI	1	2	8485	5.1	433							
			TEXAS	14	47	6867	4.8	326	3	16	7686	410	2	7561	366
		415220	TEXAS	12	46	6278	5.5	346	2	9	8275	440	3	7924	365
		422917	TEXAS	1	1	2360	5.3	125							
		439589	TEXAS	2	3	6500	4.6	316							
		460291	TEXAS	4	11	6560	4.7	307							
		462260	TEXAS	6	11	8136	5.0	401	1	31	6370	317	1	7063	334
		469298	TEXAS	21	38	7908	4.9	395	6	18	9329	438	1	9109	425
		470664	TEXAS	40	104	7274	4.9	356	7	8	7755	381	3	7587	374
		478367	TEXAS	4	6	7416	5.4	401							
		487640	TEXAS	4	9	6643	5.6	376	1	2	7810	444			
		488702	TEXAS	5	5	7662	5.0	381	2	1	6790	372			
		499210	TEXAS	2	3	8355	4.7	393	2	20	7993	390	2	7657	376
		501129	TEXAS	7	25	7290	5.1	371							
		526632	LOUISIANA	1	1	9830	5.6	550	1	15	8480	428			
			TEXAS	4	9	6137	5.3	318	2	32	7500	360	1	7063	334
	M. SH	61373	TEXAS	1	1	9290	4.7	434							
		72004	TEXAS	1	1	7270	4.4	320							
003	HOL.	900279	TEXAS	3	7	15292	3.8	572	3	13	14181	522	3	15096	559
		967673	TEXAS	3	6	13476	3.9	529	3	6	14173	524	2	10819	405
			NEW MEXICO	1	1	13900	3.2	459	1	9	12750	457			
		1021211	TEXAS	3	4	13983	3.5	488	3	13	13413	494	1	14944	556
	JER.	446075	TEXAS	4	10	8298	5.5	453							
		446573	TEXAS	1	2	6020	5.2	311							
		464077	TEXAS	2	8	8032	5.2	413							
		505074	TEXAS	2	8	9660	5.1	491	1	2	9700	522			
		513245	TEXAS	5	14	8426	5.3	442							
		516104	TEXAS	2	2	6725	5.5	366	2	29	8305	412			
004	HOL.	853392	TEXAS	1	1	7350	3.2	237							
005	JER.	491248	TEXAS	1	1	7020	4.3	303	1	28	9080	375			

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. O.AUS.	CONTEMPORARY RECORDS NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
001	GUER	338543	MONTANA	4	13	6645	4.9	323	3	3	8259	352	2	8971	386
		371459	OHIO MONTANA	1 3	3 9	8953 7410	4.2 4.6	382 343	1 2	1 7	5750 6965	255 339	1	7270	358
		380378	MONTANA	5	19	6994	4.8	333	5	6	8315	380	3	8148	401
		424898	MONTANA	3	10	7454	4.0	293	3	8	7844	336			
		454534	MONTANA	1	1	8560	4.3	365	1	21	13520	470	1	13680	464
		461040	MONTANA	2	3	6995	5.6	388	2	5	11543	503	1	7270	358
		475700	MONTANA	4	10	4976	5.3	265	4	12	6823	310			
HOL.		898201	MONTANA CALIFORNIA	18 1	68 1	13503 13840	3.5 3.4	468 475	18	16	13375	467	3	12879	445
		912226	MONTANA IOAHO	64 1	154 2	11504 10270	3.7 3.8	423 391	59 1	19 16	13244 12560	455 455	2 2	12683 12208	429 441
		964895	MONTANA	17	52	13564	3.5	475	15	12	12407	425	2	11771	412
		965031	MONTANA UTAH	21 1	29 1	11979 10300	3.9 3.4	463 350	21 1	17 8	12566 12250	469 455	1	12387	447
		965033	MONTANA	7	8	13605	3.5	476	7	12	12619	462	1	12876	468
		985721	MONTANA	7	8	13466	3.6	475	7	21	12489	466	1	13385	472
		987428	NEW YORK MONTANA	1 49	1 108	7610 13579	4.3 3.3	325 443	43	16	12715	453	2	12047	405
		997609	MONTANA	18	52	12194	3.7	449	11	10	12981	438	2	12339	427
		1016129	MONTANA	5	7	11862	3.4	399	5	16	13534	458	2	12435	453
		1018772	MICHIGAN FLORIDA COLORADO	156 1 3	271 2 6	11754 13720 13366	3.6 3.4 3.4	427 471 459	131 1 2	10 4 14	11953 12665 12634	433 445 468	2 1 2	12087 9461 11680	439 368 441
		1055440	MONTANA	10	22	12767	3.6	463	9	22	13014	459	2	12740	452
		1139987	MONTANA WASHINGTON	72 2	132 5	11287 12985	3.7 4.5	417 572	72 2	14 6	12953 12706	467 491	2 1	12637 11848	442 477
		1157820	MONTANA WASHINGTON	11 2	24 4	12166 14253	3.4 3.7	415 514	10 2	19 74	13398 12778	458 487	2 1	12383 11968	425 478
		1167505	MONTANA	12	13	13779	3.6	489	12	11	12365	455	1	12821	450
		1169416	MONTANA WASHINGTON	20 1	31 2	12097 15295	3.4 3.6	410 570	20 1	13 12	12305 13375	439 503	2 1	12571 11478	459 423
		1196037	MONTANA	4	4	12645	3.6	457	4	38	12348	451	1	11510	416
		1200825	MONTANA	2	3	13650	3.3	456	2	24	13108	466	1	14911	496
JER.		465695	MONTANA	4	10	7004	5.6	390	2	9	7833	436	2	7546	387
		473710	MONTANA	1	2	7040	6.4	443	1	8	8425	429	1	8164	439
		487489	MONTANA WASHINGTON	9 1	44 1	8299 4430	5.4 7.3	446 325	6	13	8403	467	2	8487	463
		506327	MONTANA WASHINGTON	6 1	21 1	7196 5320	5.7 4.5	405 242	6	8	7805	414	1	7455	404
		516254	MONTANA	3	3	7630	6.0	458	1	10	7110	396			
		520106	MONTANA	15	41	7766	5.7	444	9	12	8058	446	2	8052	438
		522584	MONTANA	8	14	8595	5.2	438	5	9	7923	433	2	8350	446
		549995	MONTANA	3	3	7670	5.4	417							
B.S.		111311	MONTANA	1	1	7280	4.6	336							
		111658	MINNESOTA MONTANA	1 2	1 3	6210 14450	4.4 4.2	273 596	1	17	11590	458			
		115987	MONTANA	2	4	8775	4.0	350	2	20	11165	441	1	10322	410

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK TEST LB. PCT.	FAT LB.	305-DAY CONTEMPORARY Av.				YEARLY HERO AV.		
							ND.	RECORDS	MILK	FAT	RECORDS	MILK	FAT
							DAUS.	NO.	LB.	LB.	NO.	LB.	LB.
	117501	MDNTANA	4	6	11673	4.2	505	4	10	10486	439		

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV. FAT LB.	YEARLY HERO			AV. FAT LB.
									NO. OAUS.	RECORDS NO.	MILK LB.		NO.	RECORDS NO.	MILK LB.	
001	GUER	389705	IDAHO OREGON	4 1	13 1	6707 5800	4.9 5.0	322 292	1	4	8190	376	2	8813	430	
		407801	IDAHO	9	18	8472	5.0	418	7	4	8675	410	2	8341	411	
		422543	IDAHO OREGON	31 3	81 5	8096 8914	4.8 4.5	384 406	25 1	5 11	8879 8783	428 418	3 2	8683 8399	416 404	
		427214	IDAHO	7	17	8851	4.7	408	6	5	8958	430	2	8655	396	
		461437	IDAHO	8	18	8923	4.9	431	8	5	8895	423	2	8138	397	
		464576	IDAHO	14	29	9064	4.8	431	14	6	9121	425	2	9057	421	
		469356	IDAHO	3	5	8623	4.5	386	3	7	9218	450	2	8864	424	
		479965	IDAHO	3	6	7968	5.2	409	3	3	8653	401	1	8873	416	
		501657	IDAHO	1	1	9250	5.1	470	1	12	13030	537	1	10475	462	
	HOL.	1122938	IDAHO OREGON	22 1	41 1	13248 11430	3.6 3.3	466 381	21 1	6 1	13540 15080	486 472	2 1	12554 11718	456 407	
		1125659	IDAHO	8	19	12701	3.7	461	4	5	14646	520	3	12906	454	
		1128160	IDAHO	2	7	12347	3.8	461	1	5	13395	484	4	12197	427	
		1133483	IDAHO WASHINGTON	21 2	32 2	12052 13140	3.7 3.7	443 485	18 2	21 25	13448 11880	518 449	1 1	13333 12590	512 479	
		1163815	IDAHO	8	13	13717	3.4	465	7	8	13342	482	2	13369	466	
		1182891	IDAHO WASHINGTON	3 1	3 2	12513 10685	3.4 3.5	423 367	2 1	4 11	12720 9975	465 377	1 2	12110 9707	428 360	
		1186764	IDAHO WASHINGTON	13 4	17 4	14068 13720	3.4 3.6	480 497	10 3	6 43	14230 13690	497 524	1 1	14036 14632	501 577	
	JER.	479893	IDAHO	4	5	9173	5.0	458	2	4	9095	478	1	8442	447	
		493740	IDAHO	12	38	7914	5.6	438	11	6	8780	474	2	8241	442	
		511404	IDAHO	13	34	9255	5.3	487	11	7	8151	450	2	8306	439	
		512756	IDAHO	11	18	7433	6.0	445	10	5	8246	450	2	7379	406	
		526267	IDAHO	1	2	8070	5.6	449	1	4	6860	384	1	8219	458	
		539169	IDAHO UTAH WASHINGTON	14 1 1	22 2 1	7741 7690 10240	5.7 5.1 6.2	441 396 632	13 1 1	18 48 34	8843 6950 9370	457 336 508	1 1 1	8129 9483	432 532	
		545567	IDAHO	5	8	8537	5.8	486	5	14	8670	467	1	8648	453	
		553744	IDAHO	2	2	6565	6.2	407	2	12	8230	454	1	7336	391	
	M. SH	60612	IDAHO	3	5	8611	4.0	350	1	6	8700	327	1	8306	305	
		111354	IDAHO	1	1	6880	3.5	239	1	6	9240	351	1	7903	286	
002	GUER	294575	IDAHO OREGON	5 1	8 3	7941 10750	4.9 4.8	391 520	5 1	8 7	7731 9500	369 514	2 2	7568 8884	367 449	
		327055	IDAHO	1	3	7800	4.9	378	1	3	9137	433	2	8279	391	
		353947	IDAHO	1	1	9120	4.9	447								
		411957	IDAHO	1	2	5430	4.9	263	1	5	5965	289	2	5756	278	
	HOL.	898768	IDAHO	4	4	12550	3.5	437	1	1	10840	445				
		919232	IDAHO	2	3	13998	3.5	488	2	8	15110	533	1	13832	495	
		920505	IDAHO	6	18	13139	3.6	464	6	11	13252	479	2	12609	453	
		952453	IDAHO WASHINGTON OREGON	17 1 8	42 1 15	13942 19000 14905	3.6 3.7 3.5	499 697 519	15 1	8 7	14516 18520	537 775	2 1 2	13421 16110 15566	492 706 559	
		983893	IDAHO	6	24	12771	3.6	459	6	4	12999	453	3	12488	451	
		1005703	IDAHO	17	45	14028	3.7	518	14	7	14492	526	2	13683	506	

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	Breed	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	3DS-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
									NO.	RECORDS	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
003	JER.	1029444	IDAHO	6	15	13117	3.4	439	6	4	14630	540	2	12829	465
		433946	IDAHO	4	9	7712	5.4	408	3	6	7470	393	2	7845	407
		449280	IDAHO	9	41	8490	5.5	463	7	11	9454	496	4	9277	487
		451608	IDAHO	7	22	6944	5.7	397	4	6	8035	437	2	7928	422
		478009	IDAHO	6	10	8962	5.1	452	5	9	7815	414	2	8119	392
		490113	IDAHO	13	28	8687	5.2	450	12	10	8772	469	2	8675	462
		492853	IDAHO	17	46	8406	5.1	426	15	15	8395	430	2	8411	433
		323488	IDAHO	2	5	9515	4.6	444	1	2	8610	400			
003	GUER	355320	IDAHO	1	10	9029	5.4	489	1	7	9586	460	6	9530	462
		369360	IDAHO	2	7	10551	4.7	491							
	JER.	452003	IDAHO	3	11	7928	5.3	420	1	8	8976	463	3	8393	449
		471897	IDAHO	1	2	7820	5.0	392	1	2	7800	445			
		474234	IDAHO	1	2	9375	5.1	478	1	3	8400	433	1	8415	432
			OREGON	1	1	10300	5.0	515	1	5	9520	544	1	9570	519

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY RECORDS NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	MILK LB.	AV. FAT LB.
001	GUER	302430	COLORADO	8	20	9678	4.9	465	6	41	12582	508	2	11005	453
		303730	COLORADO	2	3	9530	4.7	442							
		310556	COLORADO	2	6	7180	4.6	325	1	18	13090	518			
		333160	KANSAS COLORADO	1 1	3 3	10667 8847	4.3 4.5	459 394	1 1	1 5	8915 8980	401 436	1 2	6998 8486	324 409
		341293	COLORADO	16	39	7253	4.7	343	1	6	8650	423	2	9445	429
		351629	COLORADO	3	6	7606	5.1	392							
		367267	COLORADO	11	20	7548	4.7	357	6	5	7750	382			
		376947	COLORADO	1	1	11540	4.7	540							
		404160	KANSAS COLORADO NEW MEXICO	2 18 1	4 27 2	5947 8294 8305	4.9 5.1 4.5	296 422 375	10	9	8947	426	1	8743	426
		420514	COLORADO	1	2	12130	4.4	537	1	8	11530	550			
		438434	COLORADO	1	1	5570	5.3	293	1	25	8760	413	1	9418	441
		446280	COLORADO	3	4	10872	4.7	505	1	5	9630	487	1	8262	405
		448408	COLORADO	1	1	4360	4.9	213	1	8	8570	401	1	8633	416
		449856	COLORADO	10	18	7703	4.9	376	4	3	9461	425	2	9076	404
		500458	COLORADO	1	1	9220	4.6	424	1	15	10910	454	1	9418	441
HOL.		765808	COLORADO	15	49	13685	3.6	493	6	20	12799	486	2	12976	457
		896306	PENNSYLVANIA	2	8	12628	3.7	459	2	12	13764	515	4	13800	509
		909945	WYOMING COLORADO NEW MEXICO	1 36 1	1 81 1	11480 14293 14760	3.9 3.6 4.0	446 516 592	1 29	6 19	9940 13046	356 499	1	13411	496
		929100	COLORADO	3	7	12693	3.6	449	3	8	12275	455	1	11980	467
		940826	COLORADO	12	33	13578	3.6	479	8	17	13846	507	2	11773	452
		951735	COLORADO	5	10	9584	3.5	335	1	9	12395	477			
		978638	COLORADO	6	15	13406	3.6	480	6	20	13143	531	2	11606	468
		1016436	COLORADO	20	33	14379	3.7	532	16	17	12320	477	2	11607	443
		1045578	WYOMING COLORADO	1 22	1 37	11140 11904	3.4 4.0	384 467	1 19	9 19	12630 13117	424 491	1	12381	476
		1178951	COLORADO	19	29	14486	3.7	523	17	26	13524	515	1	12757	486
		1192178	COLORADO	7	10	14541	3.5	504	5	31	15210	550	2	13505	495
		1223519	COLORADO	1	1	15620	4.0	620	1	25	16760	601	1	13821	528
		1237336	COLORADO	1	1	16190	3.2	516					1	15925	470
JER.		426547	COLORADO	13	42	6126	5.3	327	2	5	7404	388	3	6754	362
		471419	CONNECTICUT FLORIDA	1 5	2 7	8710 9091	4.6 5.5	397 497	1 5	19 74	7970 8395	400 447	1 1	7543 7862	384 403
		489716	COLORADO	1	1	15580	4.4	692					1	10693	519
		490484	COLORADO	4	10	11709	4.5	526	1	1	15580	692	1	11085	532
		490872	COLORADO	5	11	7146	5.0	358	2	5	7135	356	1	10486	378
		491583	TEXAS	1	1	6120	5.6	340	1	147	9810	517			
		492412	COLORADO	2	6	8553	5.3	453							
		495206	COLORADO	2	6	7211	5.1	368							
		502087	COLORADO	2	2	5800	6.2	359							
		506603	COLORADO NEW MEXICO	4 1	5 1	7203 8560	5.2 5.0	372 427	3	3	7730	405	1	7667	355

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
		552063	COLORADO	1	2	8635	5.2	445	1	5	7975	401	2	8442	435
		552464	COLORADO	2	2	8510	5.4	459	2	5	8335	411	1	8442	435
B.S.		64877	COLORADO	4	4	12278	4.3	527	3	4	12413	501			
		70429	COLORADO	15	24	11376	4.1	462							
		71872	KANSAS	1	1	5990	3.6	218					1	8164	317
		86316	COLORADO	5	9	11581	4.4	512	1	8	9810	420	2	9244	372
		115145	COLORADO	4	4	15283	4.0	610	3	2	12770	516	1	12748	499
M.SH		28980	COLORADO	1	1	4620	3.8	174	1	1	10960	423			
002	GUER	361212	COLORADO	14	32	8997	4.8	430	2	7	8230	430	1	8284	419
		411022	COLORADO NEW MEXICO	2 1	4 1	6810 6570	5.2 4.5	349 297	2	4	8425	413	2	8748	437
003	HOL.	789084	IOWA IOWA COLORADO	1 1 6	1 1 10	10680 9230 10493	3.2 4.1 3.6	340 374 377							
		793004	NEW YORK PENNSYLVANIA MARYLAND VIRGINIA COLORADO UTAH	6 2 1 1 2 1	15 9 5 2 2 5	12872 12814 11898 10020 8305 14604	3.6 3.4 4.2 3.6 3.5 3.6	444 430 494 355 290 517	2 1	8 8	11595 11434	409 431	2 4	11582 12064	399 454
		837973	INDIANA ILLINOIS MICHIGAN WISCONSIN NORTH DAKOTA NEBRASKA KANSAS TEXAS COLORADO UTAH	2 3 1 1 1 2 1 3 13 1	6 10 8 3 1 5 1 5 18 1	12277 10171 10715 11263 7700 8372 7710 12227 10691 15490	3.8 3.8 3.6 3.4 3.9 3.5 3.6 3.8 3.7 3.2	451 373 383 379 298 289 280 462 374 492	2 1 1 1 1 2 1	3 13 3 5 4 19 9 34 6	13402 14170 14794 15095 10290 12548 15250 11222 14600	492 520 497 542 351 454 562 409 494	2 2 4 2 2 2 1 1	12996 11429 14511 13990 11486 10458 13407	480 442 501 513 420 383 474
		909731	NEBRASKA KANSAS COLORADO ARIZONA	1 1 8 1	3 3 16 1	9397 8673 11770 10700	3.3 3.5 3.5 3.6	311 303 409 386	1 3	6 22	9383 12552	332 449	2 1	9042 11042	304 407
004	HOL.	696994	COLORADO	3	7	10515	3.4	360							
		757548	COLORADO	2	5	14459	3.8	543							
		789917	COLORADO	1	1	15800	3.6	573							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
									NO.	RECORDS	MILK LB.	FAT LB.	NO.	RECORDS	MILK LB.
001	HDL.	913785	MONTANA	2	8	13097	3.3	434	1	4	12697	447	4	12298	416
		992960	MONTANA	3	12	11358	3.4	385	1	5	13213	432	2	12906	434
JER.		398864	CALIFORNIA	2	8	7299	4.8	349							
		402288	NEW MEXICO	14	43	6036	5.1	306	2	1	7830	379			
		403772	NEW MEXICO	2	2	6425	4.5	288							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERO		AV. FAT LB.
									NO. DAUS.	NO. RECORDS	MILK LB.	FAT LB.	NO.	MILK LB.	
000	JER.	388080	ARIZONA	26	86	7431	5.3	393							
001	HOL.	870031	ARIZONA	3	7	10510	3.4	356							
		940658	ARIZONA	81	180	12543	3.5	428	69	70	13367	453	2	14346	513
		962001	ARIZONA	1	1	17310	3.7	644							
		962772	ARIZONA	25	78	11960	3.6	427	22	49	14398	497	3	13207	479
		975447	ARIZONA	7	16	8064	4.3	347	3	57	12063	407	4	13704	490
		975475	ARIZONA	2	11	11831	3.9	456	1	66	12820	431	5	13872	497
		991502	ARIZONA	3	10	13420	3.9	515							
		1001500	ARIZONA	2	5	13720	3.4	462							
		1007395	ARIZONA OREGON	7 1	16 1	12096 8670	4.1 3.8	496 327	1	42	14290	489	2	13380	480
		1044679	ARIZONA	6	7	13624	3.5	480							
002	GUER	369481	ARIZONA	7	15	9420	4.7	431	4	7	12784	640	1	9069	448
		397307	OHIO INDIANA	5 1	10 1	8598 8290	5.0 4.9	430 409	1	19	10370	484			
		397309	IOAHO ARIZONA	1 4	1 6	10130 10426	4.6 4.5	469 468	2	11	10393	507	1	9069	448
		476906	WISCONSIN ARIZONA	1 5	1 7	8190 10422	5.1 5.0	421 516	1 4	20 5	8200 12560	379 627	1	8110	379
	HOL.	943421	ARIZONA CALIFORNIA	5 1	10 1	13632 15610	3.1 3.3	429 515	4	33	14827	528	2	12205	454
		958068	ARIZONA	6	9	13430	3.4	458	6	36	14672	525	1	12579	460
		972132	ARIZONA	1	1	16600	3.3	541							
		973160	ARIZONA	4	6	9648	3.8	365							
		996057	ARIZONA CALIFORNIA	1 1	2 1	9325 8880	3.2 3.1	299 277							
		1014936	ARIZONA	45	100	12579	3.7	457	39	44	14602	505	2	12910	475
		1181012	ARIZONA	10	12	12238	3.4	414	10	78	12810	459	1	13525	485
		1245619	ARIZONA	4	4	11425	3.7	420	4	129	12133	430	1	13707	489
	JER.	458158	ARIZONA	4	7	6631	4.7	310							
		495032	ARIZONA	3	6	7195	5.2	375	2	23	8505	416	1	8442	413
003	HOL.	1121046	ARIZONA	2	2	14960	3.5	525							
		1131257	ARIZONA	3	3	14710	3.6	524							
	JER.	511224	GREGON	1	4	9530	6.4	615	1	10	9805	507	4	9186	478
		521167	UREGON	1	2	6225	5.0	311	1	6	6945	381	2	7211	397

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
									ND.	RECORDS	MILK	FAT	RECORDS	MILK	FAT
									DAUS.	NO.	LB.	LB.	NO.	LB.	LB.
001	AYR.	84187	UTAH	1	1	7680	3.9	300	1	15	9900	390			
		111228	WYOMING	1	1	7620	3.8	292							
			UTAH	2	2	10425	4.3	448	2	11	9780	374			
	GUER	275958	UTAH	2	2	8095	4.6	371	1	6	11000	436	1	12350	485
		342656	IOAHD	6	16	8339	4.8	396	6	23	8849	416	3	8589	406
			UTAH	16	35	7703	4.9	374	11	16	9326	432	1	8817	404
		354576	IDAHO	11	29	8423	4.7	387	10	18	9129	429	3	8461	399
			WYDMING	1	1	11300	3.7	413							
			UTAH	14	42	8521	4.4	369	14	14	9676	400	1	9345	392
		356088	IOAHO	7	11	7097	4.4	312	7	9	10268	428	2	9109	391
			WYOMING	2	3	8115	4.4	349	1	1	16045	604	1	12660	453
			NEW MEXICO	2	4	8372	4.6	381	2	53	9680	438	1	10693	492
			UTAH	8	21	8169	4.4	351	8	11	10098	412	1	9248	389
		403520	WASHINGTON	1	1	7780	4.7	368							
		432502	IDAHO	1	1	11420	5.2	599	1	4	11700	571	1	10573	494
			UTAH	9	16	7592	4.7	356	8	13	10204	406			
		483631	UTAH	1	1	8600	4.4	380	1	18	12240	441			
HOL.		806294	IDAHO	28	42	12816	3.6	459	24	10	12087	443	2	11520	423
			WYDMING	8	16	11490	3.4	390	7	7	11858	394	1	11134	385
			NEW MEXICO	2	3	12200	3.6	441	2	18	12765	468	1	10955	383
			UTAH	148	325	12676	3.6	451	123	12	13012	471	1	12601	456
			NEVADA	1	2	16975	3.2	545	1	48	13480	452			
		819479	IOAHD	34	58	12258	3.8	463	32	10	12414	467	1	11979	438
			WYOMING	24	54	12325	3.5	433	23	5	12079	418	1	10955	379
			UTAH	193	392	12304	3.6	441	189	13	12731	461	1	12242	445
			NEVADA	1	2	15310	3.6	551	1	41	13765	460			
			WASHINGTON	1	4	14533	3.3	472	1	5	11565	444	2	12732	449
		837635	UTAH	12	26	11937	3.9	460	12	16	12634	471	2	13084	471
		848257	IDAHO	6	7	10992	3.6	395	6	7	11435	422	1	9977	345
			WYOMING	4	9	11308	3.5	391	4	3	12140	387	1	11091	370
			UTAH	39	81	11941	3.6	427	32	9	12158	436	1	11704	421
		877766	IDAHO	15	27	14024	3.4	479	8	8	11532	420	2	11420	396
			WYDMING	5	11	12268	3.2	393	5	11	13023	451	1	13483	473
			COLORADO	1	5	13192	3.4	443	1	6	15064	515			
			UTAH	49	102	11529	3.6	410	49	10	11955	437	1	11775	429
		877820	WYOMING	1	2	10550	3.0	311	1	8	10245	357	1	10628	363
			UTAH	8	15	14270	3.4	486	4	7	11504	412	1	11390	407
		903205	IDAHO	20	30	12086	3.7	441	19	11	12466	446	2	11876	427
			WYOMING	9	14	11533	3.6	410	9	9	12068	416	1	9631	359
			UTAH	66	119	12254	3.7	451	65	11	13072	475	1	12289	444
		906106	UTAH	1	2	11930	3.8	447	1	15	12625	464	1	12546	468
		906555	IOAHD	1	2	12780	3.5	450	1	3	12810	454	2	11358	379
			WYDMING	3	6	10167	3.1	315	3	4	10893	377	1	10753	361
			UTAH	33	66	11294	3.5	390	25	12	11218	416	1	11220	401
		917134	MONTANA	1	1	9050	3.4	304							
			IDAHO	26	35	12352	3.6	439	26	6	13038	469	1	12578	447
			COLORADO	1	2	10700	4.0	420	1	5	13685	509			
			UTAH	99	146	12326	3.7	453	97	14	13315	480	1	12404	441
		919383	MONTANA	1	1	8180	3.7	301							
			IDAHO	67	91	13935	3.6	504	63	7	13783	497	1	12950	465
			WYOMING	9	13	13111	3.5	452	9	11	12335	418	1	11140	366
			COLORADO	1	3	16360	3.4	554	1	7	14787	513			
			UTAH	208	379	13359	3.6	483	205	14	13246	482	1	12784	462
		926234	IDAHO	11	14	14548	3.9	567	9	14	14938	534	1	14459	531
			WYOMING	6	8	11488	3.5	405	6	15	13578	454			
			NEW MEXICO	1	2	14450	4.3	627							
			UTAH	29	56	12828	3.8	479	29	14	13376	490	1	13910	526
		995039	IDAHO	3	3	8413	3.6	300	3	9	14087	542	1	12197	443
			WYDMING	3	8	11859	3.6	424	3	12	12633	444	1	8949	338
			UTAH	61	126	11559	3.7	423	57	10	12404	449	1	12382	450
		1001822	IDAHO	6	12	12928	3.7	477	5	11	11577	443	2	10814	420
			WYDMING	6	12	11292	3.7	419	6	7	11918	431	1	11390	413

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE UTAH	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			YEARLY HERD	MILK LB.	FAT LB.
								NO. DAUS.	RECORDS NO.	MILK LB.			
			48	93	12716	3.6	461	46	13	13360	483	1	13076
	1031143	UTAH	25	45	11083	3.8	417	24	14	12742	476	1	12002
	1035459	WISCONSIN	1	1	13900	3.5	481	1	3	12680	440	1	14301
		IDAHO	36	53	13107	3.5	461	32	9	12812	470	1	12369
		WYOMING	10	14	14201	3.3	465	9	19	13043	448	1	10867
		COLORADO	1	2	16495	3.4	548	1	8	14415	491		
		UTAH	166	293	13079	3.5	462	160	13	13013	471	1	12434
		NEVADA	2	3	14400	3.6	514	2	2	12740	451		
		WASHINGTON	1	1	12030	3.6	429	1	42	11090	433	1	10835
	1038509	NEW YORK	1	1	10680	4.0	428	1	5	9630	363	1	12535
		WISCONSIN	2	3	14118	3.8	524	2	29	14025	500	1	12797
		MINNESOTA	2	2	16700	3.5	579	2	7	15310	500	1	13816
		IOWA	1	1	17850	3.7	652						
		MONTANA	3	4	12943	3.7	478	3	14	14060	485	1	13770
		IDAHO	99	142	14394	3.5	501	93	10	13234	481	1	12882
		WYOMING	23	37	14135	3.4	472	23	7	12991	435	1	10998
		COLORADO	11	15	17660	3.3	579	11	19	15043	505	1	15616
		NEW MEXICO	1	3	12593	3.6	455	1	19	12507	455	1	10856
		UTAH	332	600	13536	3.5	476	318	13	12864	465	1	12458
		NEVADA	1	1	14910	3.3	498	1	46	12770	458		
		OREGON	1	1	15810	3.7	583	1	32	13320	502	1	13276
	1049179	UTAH	12	33	13557	3.5	480	9	6	13338	484	2	14210
	1054514	WYOMING	1	1	14220	3.6	514	1	4	18410	620		
		UTAH	10	17	12538	3.6	443	9	17	14203	514	1	12927
	1070226	MINNESOTA	16	22	15791	3.4	549	14	40	15988	534	2	11650
		MONTANA	1	2	13585	3.7	506	1	16	12850	480	2	13031
		IDAHO	44	54	13938	3.6	502	40	9	14809	530	1	14300
		WYOMING	6	7	13385	3.3	444	6	15	13778	449		
		COLORADO	1	1	14490	3.3	471	1	4	14960	518		
		UTAH	92	113	13141	3.6	476	90	16	13739	498		
	1072341	IDAHO	3	5	12003	4.0	479	3	9	13713	538	1	12687
		WYOMING	5	12	11380	3.4	382	5	5	11668	401	1	9529
		UTAH	31	72	12709	3.6	449	31	12	13222	470	2	12811
	1082291	IDAHO	5	5	15380	3.7	556	5	8	15066	524	1	13443
		WYOMING	1	1	14940	3.4	506	1	11	14130	476		
		UTAH	5	5	13352	3.9	510	5	13	12808	460		
	1085728	MARYLAND	1	1	8900	3.1	272						
		MONTANA	1	2	12340	3.5	432	1	11	12395	477	1	10464
		IDAHO	1	1	12660	3.9	499	1	1	15820	596	1	10192
		UTAH	26	74	12347	3.7	453	25	15	12661	472	2	12433
	1148183	UTAH	6	12	14023	3.7	514	6	24	14723	508		
	1169868	UTAH	16	32	13523	3.8	516	15	12	12053	474	1	12402
		NEVADA	1	1	17130	3.4	582	1	1	14200	483		
	1181663	IDAHO	6	8	13940	4.0	546	5	16	13675	485	1	12994
		WYOMING	4	6	12373	3.5	421	4	8	12975	422		
		UTAH	31	44	13191	3.7	485	28	16	13587	488		
	1223243	IDAHO	4	8	14815	3.6	524	4	7	13784	469	2	13015
		WYOMING	1	1	16500	3.5	576	1	16	13900	453		
		UTAH	18	20	15034	3.6	544	18	30	13558	501		
	1223970	IDAHO	4	4	13848	3.6	497	4	4	12930	454	1	12644
		COLORADO	1	1	18030	3.1	566	1	4	14070	495		
		UTAH	5	6	13428	3.4	458	4	21	13561	487		
JER.	452124	UTAH	11	23	7532	4.6	351	3	13	8072	409	1	8039
	452754	IDAHO	8	11	7451	5.3	390	6	8	7375	381	1	7700
		UTAH	41	89	7567	5.2	391	26	18	7904	398	2	8116
	463575	UTAH	9	13	8202	5.7	469						
	463942	IDAHO	1	2	7390	4.8	352	1	33	7160	344	2	6938
		UTAH	9	22	8463	4.8	410	5	15	8172	420	2	8206
	468521	IDAHO	7	10	8536	5.1	433	3	7	7280	396	1	7979
		UTAH	40	68	7750	5.2	400	28	17	8281	419	1	9421
	489190	IDAHO	4	4	4140	5.2	216	3	5	6367	357	1	6882
		UTAH	19	23	6802	5.3	360	6	12	7615	383	1	7750
	490139	UTAH	16	19	7960	5.2	409	14	12	8198	417		

BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREEO	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY	CONTEMPORARY	AV.	YEARLY	HERO		
									NO.	RECORDS	MILK	FAT	RECORDS	MILK	FAT
		491233	IOAHO WYOMING UTAH	3 2 22	4 5 54	6423 6869 7766	5.1 4.7 5.0	319 323 391							
		520246	UTAH	5	18	6342	5.5	351	5	31	7812	398	2	8214	421
		525225	IOAHO WYOMING UTAH	1 1 25	1 1 53	5720 5430 7017	5.6 5.2 5.2	319 282 370	1 1 9	15 1 8	6880 6260 7705	344 290 400	1 1 1	6627 6747 7458	348 331 387
		527917	WASHINGTON	5	10	10538	5.2	540							
		530097	IOAHO UTAH	1 7	1 10	7670 8843	5.9 5.3	454 468	1 7	6 9	7860 8446	419 448			
		546491	IOAHO UTAH	6 15	7 24	5968 7890	5.5 5.2	334 409	3 12	15 17	8150 8066	462 427	1	9859	540
		569157	IOAHO UTAH	4 9	4 11	8880 8591	5.4 5.1	480 440	4 9	30 10	9363 7877	493 421	1	10584	584
	B. S.	82238	IOAHO	1	2	8810	4.4	369	1	7	9485	380	2	9696	408
		100828	NEBRASKA	5	8	11030	4.2	459	2	4	9153	385	2	10072	421
		108388	IOAHO	2	2	12505	4.0	497	2	14	10800	445	1	10448	433
	M. SH	45599	UTAH	1	1	9930	3.9	383							
002	HOL.	776235	UTAH	10	12	11565	3.2	376	3	9	14130	507			
		841018	UTAH	4	4	11090	3.6	398	3	10	11347	410	1	12797	458
	JER.	392207	UTAH	2	3	6780	5.3	350							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD RECORDS NO.	MILK LB.	FAT LB.
									NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.			
000	HOL.	859048	WASHINGTON	2	3	15020	3.2	477							
	JER.	417546	WASHINGTON	28	103	7228	5.8	413	1	10	8449	478			
001	GUER	277077	WASHINGTON	12	44	9522	4.5	431	7	8	8549	401	1	10148	451
		279810	WASHINGTON OREGON	2 1	2 1	9030 9700	4.8 4.6	431 448	1	15	9740	459	1	11107	536
		297701	WASHINGTON OREGON	33 1	79 1	9052 8980	4.6 4.5	413 405	24 1	7 4	8946 10830	419 406	1	9309	439
		309706	WASHINGTON	5	19	9317	4.6	425	4	6	9324	427	2	8683	414
		313131	WASHINGTON	2	9	8518	5.2	445	2	8	8982	411	2	7848	360
		326136	WASHINGTON OREGON	6 4	26 9	9417 8345	4.6 5.0	427 408	5 3	1 5	9121 8217	400 406	1 2	9009 8020	416 425
		343736	WASHINGTON	3	5	8811	5.2	458							
		355736	PENNSYLVANIA IDAHO NEW MEXICO WASHINGTON OREGON	1 1 2 59 2	3 2 4 129 4	10253 7660 8587 8897 9444	4.5 4.7 5.2 4.6 5.1	468 358 451 406 483	1 1 2 55 2	2 5 14 11 14	9235 10220 10187 9723 7779	449 511 500 453 372	2 1 1 2 2	8263 9123 9378 9293	391 434 441 447
		356077	WASHINGTON OREGON	9 1	22 4	8682 7338	5.0 4.3	435 310	5 1	8 8	9028 8933	434 423	1 3	9737 8705	468 409
		360524	WASHINGTON	20	38	8369	5.1	427	10	9	9389	452	1	9349	457
		361476	MICHIGAN MISSOURI MONTANA WASHINGTON	1 1 1 31	1 1 1 83	5850 5980 11080 8367	3.8 4.3 4.4 5.1	224 259 488 425					2	9503	468
		371769	NEW MEXICO WASHINGTON OREGON	2 40 4	8 111 11	7988 8790 8859	4.9 4.7 4.8	392 413 423	2 35 4	9 11 8	8925 9234 10458	399 429 465	1 2 2	9123 9204 10312	434 434 508
		401520	WASHINGTON	17	53	10584	4.8	500	14	10	9737	457	2	9751	463
		409198	SOUTH CAROLINA IDAHO WASHINGTON	1 1 41	2 3 113	8190 6440 8421	4.5 5.0 5.1	363 327 424	1 1 36	19 2 12	8230 6237 9297	376 292 440	1 3 2	7685 7768 9354	354 353 449
		417299	WASHINGTON	1	1	6420	4.4	284	1	10	8370	366			
		418349	IDAHO WASHINGTON	1 9	1 22	8830 8217	5.2 4.9	461 399	1 9	13 17	9640 8789	441 424	1 2	9897 8778	424 415
		420535	NEW MEXICO WASHINGTON OREGON	1 24 2	5 43 2	8672 9338 6930	4.5 4.6 4.5	392 428 304	1 22 1	6 11 20	9126 9344 8350	422 434 379	1 2	9123 9228	434 439
		426217	IDAHO WASHINGTON	1 2	1 4	9710 8040	4.1 5.1	399 405	2	10	8100	398	1 2	8687 8124	416 409
		432225	UTAH WASHINGTON	2 69	7 148	8100 8590	4.9 4.8	392 411	2 65	23 14	8307 9318	386 439	2 2	8840 9528	397 453
		432528	WASHINGTON	5	9	8698	4.9	426	5	12	8889	439	1	9966	478
		433723	MAINE NEW MEXICO UTAH WASHINGTON CALIFORNIA	1 1 1 74 1	4 2 2 158 2	5980 9580 8880 8166 8280	4.6 4.9 5.1 4.8 4.5	277 462 450 386 367					2	9329	450
		435919	IDAHO ARIZONA WASHINGTON CALIFORNIA	2 1 114 1	3 1 251 2	10138 11490 9600 10650	5.0 4.5 4.8 5.1	507 515 454 541	2 1 113	5 74 13	10385 10670 9483	506 512 453	1 1 2	9908 9799 9473	486 472 460
		440558	IDAHO WASHINGTON OREGON	6 24 3	10 39 12	8211 8584 10012	5.0 4.8 5.0	406 415 496	5 24 3	5 25 13	8331 9733 10050	427 438 487	1 1 3	8551 9121 10480	390 427 512
		451355	WASHINGTON	4	6	9751	4.8	464	4	9	9008	439	1	10224	466
		457299	WASHINGTON	1	3	10637	5.2	552	1	12	8707	468	1	7957	410

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. DAUS.	CONTEMPORARY RECOROS NO.	MILK LB.	FAT LB.	AV. RECORDS NO.	YEARLY HERD LB.	AV. FAT LB.
	460378	WASHINGTON	2	2	11685	5.4	630							
	460808	IDAHO WASHINGTON	2 7	3 11	7680 8574	4.9 4.6	377 395	2 5	11 19	9740 9348	446 410	2 2	8889 9557	420 402
	465116	OHIO UTAH WASHINGTON OREGON	1 1 58 1	1 1 92 1	7940 7900 8128 10690	5.0 5.3 4.9 4.6	394 417 396 489	1 1 56 1	21 21 22 20	10420 8870 9823 9690	503 394 456 494	1 1 1 1	10944 8687 9587	507 385 452
	468032	LOUISIANA IOAHO ARIZONA WASHINGTON OREGON	1 1 1 70 1	1 3 3 135 1	8430 11120 14800 9014 7260	4.0 4.7 4.7 5.0 4.5	335 525 691 445 325	1 1 1 68 1	142 5 89 12 2	6710 9870 10775 9657 10260	316 457 508 452 459	1 1 1 1 1	6028 9832 9385 9610	276 498 436 463
	471055	WASHINGTON	5	5	9240	4.8	444	5	12	10382	487	1	12012	528
	482542	IOAHO WASHINGTON	1 36	1 49	9300 8456	4.7 4.7	438 399	1 35	7 9	11270 9546	486 448	1 1	10366 9673	462 471
	495514	WASHINGTON	29	35	8514	5.0	425	28	19	10120	457	1	9495	454
	500764	WASHINGTON	6	7	6954	4.7	409	6	72	9353	429	1	9341	456
	506917	WASHINGTON	1	1	6990	4.5	315	1	6	9660	405			
HOL.	821151	WASHINGTON	45	105	11634	3.6	412	40	12	12599	460	2	13014	477
	838876	WASHINGTON	10	42	12598	3.8	475	5	11	14027	522	1	13996	545
	903191	MINNESOTA IOWA IOAHO WASHINGTON OREGON	1 1 10 362 6	1 3 15 747 7	8780 9190 10545 12547 14253	3.6 3.8 3.9 3.7 3.6	318 359 410 457 516	1 1 9 346 5	11 10 7 20 11	14880 12637 11329 12480 13374	526 447 452 469 470	1 3 1 2 1	13538 12913 10268 12529 13554	496 472 428 467 487
	914860	WASHINGTON	13	45	13693	3.6	490	12	14	13127	470	2	13314	476
	933029	WISCONSIN WASHINGTON OREGON	1 193 1	1 443 2	15720 13085 13905	3.5 3.6 3.3	548 474 458	176 1	21 4	12380 11545	465 428	2 2	12533 12306	467 454
	936730	WASHINGTON	6	22	13173	3.4	438	4	16	13161	474	2	13475	494
	946889	WASHINGTON OREGON	4 1	6 1	13948 15590	3.8 3.5	530 553	2	11	14520	523			
	955524	MICHIGAN MONTANA IOAHO ARIZONA UTAH WASHINGTON OREGON HAWAII	1 1 5 1 1 464 6 1	2 1 20 2 4 868 9 1	11015 12030 13667 15450 18385 13529 15378 9140	3.3 3.3 3.6 3.1 3.5 3.6 3.5 3.2	362 395 497 478 633 485 533 296	1 1 5 1 1 435 4 1	6 3 14 25 6 17 6 28	12660 14160 14023 13755 12855 12998 13428 11090	456 418 508 488 467 488 479 365	1 1 2 2 1 1 3 1	11859 12361 13417 11625 12219 12919 13301 10442	433 435 472 441 441 483 484 342
	990114	WASHINGTON	18	60	14601	3.6	517	16	18	13531	489	2	13195	471
	990298	WASHINGTON	15	43	12723	3.6	462	11	12	12643	466	2	12280	463
	1005320	IOAHO WASHINGTON OREGON	7 126 2	8 229 2	8265 12319 13015	4.0 3.6 3.8	322 446 492	6 118 2	3 15 11	11063 12384 12025	410 471 449	1 1 1	7577 12072 11680	308 458 415
	1010927	MICHIGAN MONTANA IDAHO WASHINGTON OREGON	1 1 4 190 5	1 1 11 322 7	11410 12780 12618 12637 13612	3.9 3.2 3.8 3.9 3.7	448 407 473 488 510	1 1 3 181 4	10 4 10 22 27	13580 12570 14059 12523 12715	501 409 507 477 479	1 1 2 1 1	12938 7881 13719 12614 12535	484 277 497 476 470
	1019107	WASHINGTON	11	24	13284	3.7	489	11	30	12443	462	1	12361	452
	1026298	WASHINGTON	31	58	14578	3.6	524	31	18	13089	500	2	13247	499
	1072332	MICHIGAN VIRGINIA MONTANA IDAHO WASHINGTON OREGON	4 1 4 1 340 2	5 1 4 2 612 2	11361 8360 12785 8715 12777 9330	3.7 3.0 3.7 3.4 3.8 3.6	422 254 470 293 478 358	4 4 4 1 324 2	8 20 1 30 19	11246 14555 12050 12402 10480	404 512 412 474 404	1 1 2 1 1	12219 14268 10669 12337 10960	450 496 391 471 418
	1078493	MICHIGAN MONTANA IOAHO	5 1 3	8 1 9	14428 13610 11402	3.4 3.1 3.5	494 428 400	5 1 3	6 12 10	12227 12920 11061	466 451 442	1 2	12758 10858	476 432

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPEO BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY		AV. FAT LB.	YEARLY HERD		AV. FAT LB.
								NO. DAUS.	RECORDS NO.		RECORDS NO.	MILK LB.	
		WASHINGTON	160	294	13271	3.7	482	153	16	12768	479	1	12538
		OREGON	3	5	15273	3.5	533	1	22	10890	412	3	10795
	1079115	MONTANA	1	1	13100	3.5	458	1	16	14470	530	1	13440
		WASHINGTON	6	9	12528	3.5	435	2	25	14980	523	1	14454
	1080108	WASHINGTON	5	6	13580	3.8	513						
	1090981	MICHIGAN	1	1	10750	3.8	408	1	9	13400	483		
		MONTANA	11	14	14720	3.3	492	10	20	14376	512	1	13462
		ARIZONA	1	1	9630	4.1	394	1	61	9660	392	1	11216
		WASHINGTON	220	291	14494	3.6	517	208	51	13499	505	1	13628
		OREGON	4	4	15273	3.5	526	3	16	13007	466	1	13665
	1122011	ARKANSAS	1	1	20320	3.7	760						
		MONTANA	2	2	14040	3.7	527	2	26	15450	521		
		WASHINGTON	130	211	12170	3.8	456	126	30	12607	473	1	12702
		OREGON	1	3	12997	3.3	433	1	18	10590	421	2	10323
	1152236	UTAH	1	1	16600	3.4	562	1	45	13590	501		
		WASHINGTON	29	37	13251	3.5	468	29	69	12842	479	1	13314
		OREGON	1	2	10107	3.9	693	1	18	14320	515	2	15097
	1153997	MICHIGAN	1	1	10470	3.5	368	1	6	10630	366	1	11859
		UTAH	2	2	14915	3.6	526	2	9	16710	603	1	15843
		WASHINGTON	75	125	14037	3.6	507	72	49	12697	481	1	13134
		OREGON	1	1	17830	3.7	653						
	1204245	MONTANA	1	1	10930	3.9	422	1	12	11270	375	1	13538
		WASHINGTON	64	80	13174	3.8	501	59	49	13095	488	1	12900
		OREGON	2	5	15133	3.8	559	2	8	13438	490	1	12840
	1231195	WASHINGTON	3	4	15195	3.8	574	3	12	14842	537	1	14344
	1277619	MONTANA	2	2	14745	3.4	487	2	31	15320	527	1	14584
		WASHINGTON	17	17	14582	3.4	491	16	10	15214	550	1	14287
JER.	385563	WASHINGTON	4	7	9541	5.2	505	2	11	9080	467	1	9473
	405129	WASHINGTON	14	38	7910	6.1	479	2	5	9070	475	1	9516
	409520	WASHINGTON	24	75	8322	5.5	460	12	8	7998	415	2	8530
	410282	WASHINGTON	5	9	7866	5.1	395	1	16	6510	347	2	7570
	423261	WASHINGTON	3	6	10100	5.1	507	2	6	9532	474	2	10200
	430188	WASHINGTON	78	249	7753	5.6	432	51	9	8245	436	2	8193
	432294	WASHINGTON	15	46	7682	5.7	437	11	7	8038	438	1	8000
	463407	WASHINGTON	5	13	7285	5.4	403	2	7	9552	521	1	8557
	463813	WASHINGTON	1	2	10285	4.4	452						
	464951	WASHINGTON	7	18	7563	5.5	415	2	11	7512	399	2	7581
	471595	WASHINGTON	20	64	7864	5.9	458	9	9	8273	451	2	9098
		OREGON	1	6	7505	5.3	402	1	29	7818	432	4	7371
	472835	WISCONSIN	1	3	5393	6.0	328	1	7	6437	334	1	6845
		WASHINGTON	9	25	3038	5.7	460	4	9	7868	455	2	10034
	476543	WASHINGTON	2	4	10170	5.1	513	1	15	10110	553	1	9625
	478935	WASHINGTON	27	58	7607	5.2	396	16	6	8004	425	1	8707
	481244	WASHINGTON	40	76	8548	5.6	474	17	11	8319	440	1	8697
	483469	WASHINGTON	22	64	8601	5.4	460	19	9	8734	468	2	8745
	484318	WASHINGTON	41	101	7627	5.2	394	29	10	8353	438	2	8303
		OREGON	2	3	8040	5.1	405	2	5	8638	505	1	9025
	484920	IDAHO	1	2	8820	4.6	408						
		WASHINGTON	37	100	7697	5.5	427	22	12	8169	423	2	7974
	490063	MINNESOTA	1	1	14410	5.4	774						
		MISSOURI	1	2	11840	6.3	745	1	6	7910	440	2	8590
		MONTANA	1	1	7280	5.4	394						
		WASHINGTON	127	292	9137	5.3	479	82	10	8764	470	1	9031
	490422	WASHINGTON	3	8	8832	5.7	561	1	24	8758	460	2	9031

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				AV. RECORDS NO.	YEARLY HERD NO.	AV. MILK LB.	AV. FAT LB.
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.				
	499053	WASHINGTON	44	82	8271	5.6	460	26	9	8691	477	2	8827	477	
	503866	WASHINGTON	26	53	8687	5.7	497	23	13	8961	490	1	9496	505	
	506504	WASHINGTON	44	82	7903	5.8	455	32	10	8321	452	1	8676	472	
	508526	WASHINGTON	9	28	7750	6.3	486	1	7	6957	335	2	6758	339	
	508870	MONTANA	2	3	9088	4.9	446	1	10	6980	402				
		WASHINGTON	30	57	10158	5.2	527	18	27	9094	484	1	9214	496	
	510779	WASHINGTON	49	90	8300	5.6	459	39	13	8761	467	1	8943	472	
	514968	WASHINGTON	4	5	8761	6.0	521	3	17	8570	452	1	8916	479	
	516845	WASHINGTON	39	107	8532	5.4	461	23	10	8773	453	2	9286	469	
	525833	WASHINGTON	36	63	7655	5.7	435	27	7	9065	486	1	9346	503	
	540262	WASHINGTON	36	59	8259	5.6	461	27	16	8538	462	1	8807	475	
	544287	MONTANA	4	4	7998	5.4	432	1	5	7100	419	1	8557	470	
		WASHINGTON	123	195	9284	5.4	499	97	15	9300	503	1	9474	510	
	554349	IDAHO	1	1	5880	5.7	332								
		WASHINGTON	54	81	8535	5.4	460	47	19	8929	471	1	9065	481	
	556095	WASHINGTON	84	135	9313	5.3	495	69	16	9294	502	1	9510	513	
	567262	MONTANA	1	1	9230	4.6	428	1	13	6840	370	1	6813	376	
		WASHINGTON	2	2	11380	5.0	556	2	16	8735	475	1	10475	563	
B.S.	49855	WASHINGTON	2	3	7318	4.1	294								
	107516	WASHINGTON	1	1	8900	3.7	333	1	2	11630	432				
		OREGON	4	6	11419	4.4	501	3	36	12308	543	1	10283	449	
M.SH	51691	WASHINGTON	1	1	10970	4.3	471								
	132706	WASHINGTON	6	6	9802	3.9	384	5	8	8702	352	1	9567	377	
		OREGON	2	2	12460	3.4	418								
	151176	WASHINGTON	2	2	8475	4.2	345	1	13	8760	328	1	9036	360	
	184928	OREGON	1	1	11140	3.8	419								
002 GUER	441851	CONNECTICUT	1	3	11277	4.9	550	1	47	12213	631	3	11663	588	
		NEW YORK	1	3	7957	4.6	365	1	7	11397	528				
		IDAHO	1	4	10985	3.9	431	1	11	8880	412	3	8255	382	
		WASHINGTON	6	15	9474	4.8	453	6	13	9332	452	2	9824	470	
	463369	WASHINGTON	5	7	9163	4.7	434	5	9	9720	445	1	9859	464	
		CALIFORNIA	1	1	7070	5.7	402	1	22	12270	585				
	467994	WASHINGTON	4	5	8194	4.9	401	4	18	8516	400	1	9840	448	
003 GUER	428481	NEW MEXICO	1	2	12480	4.6	570	1	11	8580	402	1	9123	434	
		WASHINGTON	2	2	10410	4.6	472	2	6	11530	508	1	10344	492	
	445992	WASHINGTON	2	2	7980	5.1	403	2	7	11465	537	1	10666	511	
	1041981	WASHINGTON	16	33	12784	3.6	457	16	15	12653	457	1	11966	468	
		OREGON	2	7	12406	3.6	439	2	12	11019	401	3	9806	404	
	1072337	IDAHO	1	2	14370	3.7	528	1	5	14550	513	2	14993	534	
		WASHINGTON	22	43	14226	3.7	522	22	15	13899	519	1	14491	529	
	1183894	ARIZONA	1	1	14920	3.3	491	1	77	11310	410				
		WASHINGTON	2	4	13966	3.6	488	2	15	14240	536	1	13298	513	
JER.	467042	WASHINGTON	2	4	9263	5.5	503								
	499965	WASHINGTON	1	1	9320	5.6	516	1	5	8670	449	1	7456	408	
	511355	WASHINGTON	1	3	7193	5.9	429								
004 GULR	202407	WASHINGTON	1	1	8520	5.1	434								
	257308	WASHINGTON	8	26	7317	5.1	367	1	2	9390	402				
		OREGON	2	2	7820	5.1	393								
	274784	WASHINGTON	1	1	7890	5.0	395								
		OREGON	3	5	7695	5.9	451								

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY RECORDS NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
005	HOL.	307134	WASHINGTON OREGON	6 1	21 1	8386 8470	5.5 5.6	455 478	3	5	8913	442	3	8415	453
		759078	WASHINGTON	27	60	10936	3.7	395	1	9	14141	510	3	13182	491
		942986	WASHINGTON	6	25	13685	3.9	530	6	22	12893	478	2	11586	434
	JER.	372293	WASHINGTON	6	19	8222	5.3	433	1	7	8485	446	1	9461	530
		218620	CALIFORNIA	2	7	10639	4.0	425							
		254307	WASHINGTON OREGON	25 1	101 4	9625 10443	5.2 4.9	495 511	23 1	9 3	10089 8968	475 475	2 2	9435 9630	465 507
		255775	WASHINGTON	1	4	10610	4.5	477							
		269661	WASHINGTON	11	42	8009	4.9	385	9	12	8715	428	2	8817	451
		286843	WASHINGTON CALIFORNIA	10 2	31 5	9623 10500	5.1 4.7	492 485	7	6	8946	455	2	9427	472
		293926	UTAH WASHINGTON	1 21	6 79	7808 7691	4.9 5.4	381 412	1 19	11 23	8767 8464	425 431	2 2	9347 8655	450 458
		298246	WASHINGTON	1	2	8895	5.0	443							
		312970	PENNSYLVANIA WASHINGTON	1 10	2 28	6120 9329	5.3 4.9	328 446	1 9	20 36	9395 9565	386 457	2 2	11603 9613	416 460
		313889	IOAHO COLORADO UTAH WASHINGTON OREGON	1 1 2 69 1	1 1 2 195 4	11530 7170 7040 8170 7470	4.7 5.2 5.1 4.9 5.4	543 376 342 396 400	1 1 1 59 1	7 13 18 17 4	11480 7130 7830 9231 8275	555 336 372 441 444	1 1 1 2 1	10856	510
		314580	WASHINGTON	1	5	8734	5.3	460							
		338804	IOAHO WASHINGTON	1 5	2 12	13545 9310	4.8 5.1	637 472	1 3	1 7	7490 11909	274 526	2	9293	468
		340570	CONNECTICUT WASHINGTON	1 3	4 7	9923 8721	5.1 5.2	503 451	1 2	38 4	9983 11196	495 580	4	9911	499
		341943	IOAHO WASHINGTON	1 10	5 33	10902 9073	4.6 4.8	505 438	1 10	23 9	10186 9287	493 443	4 2	10252 9223	501 436
		357082	WASHINGTON	5	10	8369	5.3	445	5	7	9643	463	2	8677	407
		359693	WASHINGTON	5	12	7382	4.9	363	5	20	8069	390	2	7772	372
		362154	WASHINGTON	13	44	9110	5.2	472	13	31	9648	465	2	9887	505
		378647	WASHINGTON CALIFORNIA	8 1	32 1	9076 10150	5.6 5.0	506 510	7	8	9818	492	2	9572	484
		398617	WASHINGTON	2	7	9645	4.9	466	2	12	9984	487	1	10154	500
		402135	WASHINGTON	5	16	8436	5.3	440	4	7	9112	444	3	8627	437
		403935	WASHINGTON	5	17	8810	5.0	437	4	10	9509	474	2	9442	474
		413461	WASHINGTON	25	67	8598	5.0	430	23	22	9217	452	2	9196	461
		428299	IOAHO WASHINGTON	2 16	4 22	7758 8744	5.5 4.9	415 430	2 16	10 15	9535 9768	426 438	2 1	9562 9329	439 423
		433450	WASHINGTON	1	3	9307	4.9	460	1	4	11503	542	2	9254	465
		456502	WASHINGTON	22	41	8805	4.7	415	21	46	9755	434	1	9441	449
		463828	WASHINGTON	20	37	8260	5.2	431	18	17	9967	462	1	10238	469
		465409	WASHINGTON	14	17	7308	5.1	368	8	16	9096	420	1	9122	433
	HOL.	645685	WASHINGTON OREGON	7 1	16 2	13977 13635	3.2 3.1	454 421	2	6	12612	459	1	11658	439
		861102	ARIZONA WASHINGTON OREGON	1 2 1	1 11 2	11430 12997 14400	3.3 3.6 3.8	382 464 535	2 1 1	13 3 3	14931 15660	522 506	3 1	14298 16710	504 573
		967696	MICHIGAN IOAHO WASHINGTON OREGON	1 2 79 1	2 6 232 4	7855 13558 14062 18775	3.8 3.4 3.6 3.8	293 451 507 711	1 2 75 1	9 7 11 4	11740 12492 13010 13325	421 448 480 530	1 2 2 1	11859 12450 13028 11718	433 444 484 437

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE CALIFORNIA	DAUGHTERS NO. 1	RECORDS NO. 1	MILK LB. 16640	TEST PCT. 3.6	FAT LB. 593	305-DAY CONTEMPORARY				AV. YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
	990299	IOAHO WASHINGTON CALIFORNIA	1 48 1	2 151 1	12245 12894 18800	3.4 3.5 3.3	419 449 629	44	10	12590	463	2	12958	473
	1010926	IDAHO ARIZONA WASHINGTON	2 1 28	9 1 78	13141 13870 13369	3.8 3.6 3.6	487 505 473	2 1 23	12 100 12	13606 12070 12230	487 430 447	4 1 2	12617 13527 12874	457 482 461
	1035430	MICHIGAN IDAHO WASHINGTON OREGON	2 1 140 2	4 3 283 2	10379 14890 12663 15515	3.6 3.5 3.6 3.8	364 530 453 595	2 1 137 1	6 15 15 11	11437 13307 11980 15170	413 480 459 541	2 2 1 1	12511 12753 12043 14028	464 463 459 507
	1078090	IOAHO WASHINGTON OREGON	1 95 2	2 170 2	14955 11394 12630	3.8 3.6 3.8	556 429 480	1 70 2	7 15 20	12170 12345 14625	460 467 529	1 1 1	12742 12397 13407	461 460 487
	1166598	MONTANA IDAHO WASHINGTON OREGON	1 1 19 1	1 5 32 1	12790 15016 11311 15460	3.5 3.5 3.6 3.5	442 519 402 539	1 1 18 1	11 11 12 10	12300 12400 11641 14100	464 470 439 505	4 2 1 1	12911 11944 13418	468 443 486
JER.	409772	WASHINGTON	21	74	8325	5.8	480	7	8	9355	507	1	8413	458
	413078	WASHINGTON	8	33	8989	6.2	554	3	3	8731	461	1	7511	396
	446954	WASHINGTON	13	32	8522	5.6	479	10	5	7500	405	2	8528	465
	457906	WASHINGTON	21	56	8530	5.6	479	12	6	8314	448	1	8687	459
	479803	WASHINGTON	12	39	8187	5.9	482	9	7	9027	514	2	9298	542
	503506	WASHINGTON	1	1	6910	5.4	375							
	503868	WASHINGTON	4	5	6876	5.6	384	3	8	8575	478	1	7238	409
	530102	WASHINGTON	23	41	8600	5.3	453	20	11	8723	460	1	8790	459
M. SH	13822	WASHINGTON	1	1	9300	4.0	376							
	20270	WASHINGTON	1	3	10777	3.3	360	1	10	9355	322	2	9908	351
	81883	WASHINGTON	1	2	10025	4.4	436							
	121630	WASHINGTON	1	2	12330	4.3	521							
	141935	WASHINGTON	1	1	7600	3.8	289	1	19	9160	366	1	9287	378
006 GUER	306517	WASHINGTON	26	33	6724	5.0	340							
JER.	481250	WASHINGTON	1	1	8760	5.0	439							
008 GUER	425095	WASHINGTON	1	1	7630	4.9	377	1	8	8310	356	1	7303	317
	436975	WASHINGTON	1	1	8150	4.6	378	1	21	7000	297			
JER.	444690	WASHINGTON	5	13	7533	5.2	387	1	6	8925	470	1	7794	421
009 HDL.	776516	WASHINGTON	12	39	14769	3.6	527	6	15	14818	525	2	14331	515
	824057	WASHINGTON	28	86	14056	3.5	488	20	13	13444	486	2	13333	475

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. OAS.	CONTEMPORARY NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
001	GUER	288297	OREGON	2	4	8734	4.8	416	1	1	8510	392	1	11423	504
		319194	OREGON	34	97	8058	4.9	396	29	13	9206	418	2	9043	421
		321471	OREGON	2	7	9273	5.5	512	2	7	10195	515	2	10096	512
		323567	IDAHO OREGON	1 77	2 186	10145 8107	4.5 4.7	457 377	1 67	10 11	9055 8883	439 411	2	8828	408
		332408	OREGON	9	37	8320	4.7	389	5	8	9125	429	3	8699	418
		333042	WASHINGTON OREGON	1 50	1 106	6590 8201	4.4 4.9	292 397	1 42	12 10	10680 9245	559 420	1 2	11183 9467	585 432
		359210	OREGON	40	78	8735	4.8	410	38	13	9460	422	2	9338	414
		361371	OREGON	49	85	7824	5.0	389	46	12	9165	421	2	9452	437
		371692	OREGON	40	70	8342	4.6	396	38	13	9739	435	2	9365	427
		380379	WASHINGTON OREGON CALIFORNIA	30 24 4	96 62 7	10016 9576 8731	4.6 4.5 4.2	457 424 362	29 24 1	17 14 7	9436 9713 9830	453 448 434	2 2	9539 9340	459 432
		386365	OREGON	28	43	8468	4.8	398	25	16	9757	434	1	9775	436
		402726	OREGON	6	19	8041	5.2	418	5	6	9278	431	2	9076	435
		404111	OREGON	3	9	9350	5.0	472	2	4	9068	459	2	8058	386
		405790	WASHINGTON OREGON	1 36	3 84	8810 7947	5.0 4.9	442 384	1 32	182 11	9760 9148	446 419	1 2	9581 8996	502 421
		412255	OREGON	20	48	8348	4.8	395	19	10	9119	414	2	8976	417
		417129	OREGON	3	5	9800	4.9	474	3	7	10573	492	2	9917	479
		418741	IDAHO WASHINGTON OREGON	1 1 28	1 1 57	9280 2960 9213	4.7 3.7 4.5	440 109 418	1 42 20	42 13	7140 9740	337 456	1 2	8099 9567	372 448
		419747	OREGON	5	8	9113	4.5	410	5	28	10467	446	2	9836	438
		425757	VIRGINIA WASHINGTON OREGON	1 1 45	1 1 106	13330 6320 8526	4.6 4.8 4.8	613 305 408	1 43	41 12	7650 9619	360 434	1 2	8099 9403	372 429
		431982	OREGON	28	61	7817	5.0	394	25	12	9322	439	2	9070	431
		439163	OREGON	62	138	7809	4.8	376	59	10	9052	416	2	8945	419
		444119	OREGON	9	17	7443	5.0	372	9	17	9345	425	2	9087	427
		449685	WASHINGTON OREGON	5 27	8 40	9986 8045	5.0 4.8	498 386	24	13	9708	415	1	9672	424
		470666	OREGON	40	65	8352	4.8	400	35	10	9614	430	2	9580	427
		481855	OREGON	7	8	7791	4.7	364	7	14	9646	406	1	9437	408
		493443	OREGON	1	1	8210	3.9	319	1	1	11160	439	1	10006	438
		495827	OREGON	8	9	9028	4.7	425	7	17	10357	454	1	10195	451
		499743	WASHINGTON OREGON	1 11	1 13	8320 9656	4.7 4.3	394 415	1 10	34 18	7430 10091	371 442	1 1	8219 10157	392 439
		503904	OREGON	5	7	9472	4.3	408	3	24	10807	433	1	11543	535
HOL.		799089	OREGON	3	5	13418	3.6	477	1	26	11215	496	1	7946	362
		826043	WASHINGTON OREGON	3 7	5 15	11570 9830	3.8 3.7	433 358	3 7	14 10	11658 10287	455 376	1 1	12003 10599	485 403
		854181	WASHINGTON OREGON	1 39	1 51	13760 11540	3.6 3.8	494 438	1 35	24 28	13110 12072	519 462	1	11819	464
		854184	MICHIGAN IDAHO WASHINGTON OREGON	1 1 8 127	2 5 14 286	9705 15178 12934 11888	3.5 3.3 3.0 3.8	339 509 461 447	1 1 8 124	7 34 11 13	12010 10658 12495 11091	431 381 448 437	2 5 1 2	12415 13876 12622 11066	439 546 462 440
		868099	OREGON	18	52	12045	3.7	441	13	14	11437	438	3	11121	420

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO. O.A.U.S.	CONTEMPORARY NO. RECORDS	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
		876131	OREGON	1	5	17920	3.6	652	1	6	15900	567	2	14378	528
		880647	OREGON	1	1	7290	3.7	268	1	10	9840	371	1	10344	384
		911374	OREGON	5	14	13313	3.4	444	5	17	12721	482	3	10384	408
		911433	IDAHO WASHINGTON OREGON	1 1 157	4 6 336	12120 10817 11560	3.6 3.6 3.8	435 383 431	1 1 148	11 15 13	13685 9403 11212	479 393 444	4 2 2	13116 12001 10939	453 460 438
		928406	OREGON	22	43	13811	3.7	500	22	20	13614	502	2	13392	484
		933205	IDAHO WASHINGTON OREGON	1 1 53	1 1 120	10380 13350 10764	3.9 3.9 3.9	410 517 423	1 1 52	4 31 14	11590 14420 11310	416 499 443	1 1 2	9548 13527 11175	355 487 446
		955532	CONNECTICUT IDAHO WASHINGTON OREGON HAWAII	1 3 160 6 1	1 6 268 6 2	13980 10548 13481 14223 11310	3.5 3.7 3.6 3.6 3.4	495 385 481 511 384	3 4 157 6 1	4 4 21 40 21	11726 11726 13120 14373 11625	430 430 492 518 374	2 1 1 1 2	10036 13085 13048 13048 11249	392 491 459 459 357
		969524	IDAHO WASHINGTON OREGON	1 1 49	2 3 95	13625 12797 11522	3.3 3.5 3.9	444 446 447	1 1 48	12 18 15	16425 15840 11163	588 552 439	1 2 2	15260 14846 11032	548 548 439
		983512	WASHINGTON OREGON	1 158	3 262	12380 11975	3.6 3.7	440 439	1 151	4 15	11907 11624	437 448	1 1	11870 11304	440 439
		987709	NEVADA WASHINGTON OREGON	1 1 50	4 4 128	12248 11188 10691	3.6 3.6 3.7	434 402 393	1 1 49	24 19 16	15075 14903 11180	505 546 435	1 1 2	14802 10771	554 428
		995143	IDAHO WASHINGTON OREGON	2 1 129	3 2 230	10188 12945 11908	3.5 3.9 3.8	360 495 448	2 1 128	9 41 17	11618 12990 11412	440 470 438	2 2 2	11295 13952 11147	409 505 435
		1006653	OREGON	18	43	11883	3.7	441	18	15	11527	447	2	10999	432
		1030121	WASHINGTON OREGON	3 49	6 102	11265 11321	4.4 3.7	478 418	3 47	12 16	11892 11235	476 429	2 2	13631 10927	537 422
		1072355	WASHINGTON OREGON	12 6	29 8	13129 12336	3.9 3.4	507 416	12 6	38 61	13028 13646	488 482	2 1	12537 13212	467 469
		1113065	OREGON	40	90	11613	3.7	426	39	13	11336	443	2	11215	447
		1141166	WASHINGTON OREGON	1 24	1 35	7600 11470	3.2 3.6	244 413	1 24	12 11	11890 11466	463 451	1 1	12121 11067	461 446
		1147419	OREGON	21	37	12146	3.8	451	21	17	11594	461	1	11298	445
		1170323	OREGON	18	25	13929	3.8	530	17	11	13492	509	1	13302	514
		1172862	WASHINGTON OREGON	1 54	1 74	13240 11790	3.4 3.7	453 432	1 47	2 16	14970 11870	475 457	1 1	14050 11575	497 457
		1198957	WASHINGTON	5	6	10657	3.9	412							
		1199818	IOWA OREGON	1 78	1 109	10630 14106	3.2 3.4	346 480	70	20	12380	475	1	12139	467
		1208677	OREGON	41	46	13209	3.6	475	32	24	12486	464	1	12007	452
		1213990	OREGON	1	1	16140	3.2	516	1	18	15000	486	1	15162	559
		1235822	WASHINGTON OREGON	1 21	1 25	15760 14317	4.7 3.7	743 528	1 19	1 22	14910 12731	575 473	1	12234	471
		1251271	OREGON	9	10	12538	3.7	461	7	20	11904	446	1	11985	448
		1297296	OREGON	1	1	12090	3.7	445	1	15	14590	561			
JER.		398955	WASHINGTON OREGON	1 28	1 107	11470 8993	4.8 5.5	551 491	10	16	8486	463	3	8664	461
		405578	OREGON	24	77	7669	5.6	428	10	12	8152	431	2	8344	427
		410363	OREGON	45	130	8128	5.3	428	13	23	8702	463	2	8953	474
		412868	OREGON	1	8	8179	5.5	433	1	4	8123	411	4	8099	406
		447102	IDAHO NEVADA OREGON	6 1 125	13 1 351	7766 7440 8347	5.1 4.8 5.3	395 355 439	5 70	4 14	8030 8869	420 470	1 2	7563 8706	400 464

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY DAUS.	CONTEMPORARY RECORDS NO.	MILK LB.	AV. FAT LB.	YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
		449592	OREGON	33	118	8177	5.6	454	15	11	8733	472	2	8769	470
		452114	OREGON	5	14	9823	5.7	557	2	21	8149	450	2	8451	465
		455627	WASHINGTON OREGON	1 33	1 134	6030 8397	4.9 5.4	294 449	17	13	8579	459	2	8867	474
		464866	OREGON	4	12	8686	5.5	475	3	8	8490	453	3	9035	479
		465889	IDAHO NEVADA OREGON	2 1 164	5 1 347	7154 11240 8680	5.1 5.0 5.4	361 558 464	1 20 89	10840 8694	578 452	1 1 2	1 1 2	8644 9908 8589	440 573 448
		480035	OREGON	42	105	8146	5.2	424	23	13	8894	478	2	8687	461
		482685	IDAHO OREGON	1 110	1 279	6890 7329	5.5 5.8	382 421	1 60	6 14	7860 8629	417 455	1 2	7238 8560	383 453
		484691	OREGON	18	33	8839	5.1	446	11	12	9119	452	2	9139	459
		488243	IDAHO WASHINGTON OREGON	1 1 86	1 1 155	9300 9440 8416	5.1 5.5 5.3	471 521 444	1 1 55	22 88 24	7820 8160 8914	424 412 471	1 1 2	8480 8426 8917	450 431 471
		489637	OREGON	10	21	7686	5.6	425	4	18	7944	432	1	7794	399
		490356	OREGON	2	2	7970	4.8	377							
		492489	OREGON	13	28	10087	5.4	545	2	82	7840	437	2	8246	456
		495636	IDAHO WASHINGTON OREGON	1 7 238	1 21 474	7930 8268 8782	5.2 5.3 5.1	415 432 444	1 5 143	5 11 23	6930 8588 8812	364 474 467	1 2 2	7238 8931 8970	383 476 470
		500928	OREGON	30	70	7356	5.7	417	7	15	8457	442	3	8410	440
		507023	OREGON	31	73	8928	5.2	465	20	20	8498	448	2	8960	467
		513270	OREGON	47	112	7774	5.4	415	33	15	8759	454	2	8642	448
		514575	IDAHO NEVADA OREGON	2 1 59	3 1 96	6810 8086 9045	5.8 4.6 5.3	390 376 478	2 1 47	13 3 29	8450 6560 8814	459 301 464	1 1 1	7979 9175	419 481
		522995	MASSACHUSETTS OREGON	1 58	1 110	8590 8601	5.6 5.2	495 444	1 42	13 21	9050 8809	494 458	2	8787	459
		532289	MASSACHUSETTS WASHINGTON OREGON CALIFORNIA	2 1 119 1	2 1 163 1	8185 8160 7625 7460	6.1 5.7 5.7 6.8	493 461 445 507	2 1 89	5 43 31	9480 9130 8677	505 469 474	1 1 1	8785 9647 8653	485 508 475
		539167	IDAHO WASHINGTON OREGON	2 1 91	3 1 131	9085 9050 8305	5.6 5.7 5.6	501 520 462	2 1 62	11 12 26	8175 8250 8902	458 410 476	1 1 1	7979 8230 8990	419 415 478
		542059	IOWA IDAHO OREGON	1 1 55	2 1 82	9950 6220 8944	5.0 5.2 5.1	476 325 452	1 42	8 31	6190 9027	362 478	1 1	6813 9314	362 490
		555477	OREGON	40	53	9130	5.3	483	35	29	9386	499	1	9221	484
		558172	OREGON	27	37	9295	5.3	491	20	32	8673	469	1	9231	486
		565741	WASHINGTON OREGON	1 8	1 8	9650 9288	4.9 5.1	470 478	1 7	89 28	9520 9506	494 506	1 1	9363 9263	491 488
		567410	OREGON	7	9	8690	5.3	462	7	30	9127	499	1	9020	499
8.S.		59815	ILLINOIS MONTANA IDAHO WASHINGTON OREGON CALIFORNIA	1 3 1 6 26 6	1 9 3 11 32 13	12690 12268 10805 11516 11567 12505	4.0 4.4 4.3 4.3 4.3 4.3	513 530 463 490 498 530	1 3 4 4 22	14 20 9 9 49	10100 10412 12040 11240	410 422 477 490	1 2 1	10622 12197 10219	418 482 448
		85891	OREGON	1	1	8170	4.4	356	1	5	14570	576	1	10170	425
		86356	MONTANA IDAHO WASHINGTON OREGON	1 1 4 3	1 1 4 3	12690 13530 11135 8513	3.6 5.1 4.4 4.3	487 605 476 366	1 1 1 2	17 14 54	11560 11400 10765	461 443 458	1 1 1	13494 10297	520 445
002	GUER	356482	WASHINGTON OREGON	3 9	8 22	8737 8356	4.8 5.0	421 411	3 8	14 9	10614 8718	465 435	2 2	10868 9287	486 471

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	305-DAY MILK TEST.			CONTEMPORARY			YEARLY HERD				
						LB.	PCT.	FAT LB.	NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.	
001	HOL.	366486	ARKANSAS OREGON	1 5	1 13	11940 9739	3.8 5.0	457 487	1 5	40 17	8930 10226	396 526	2 2	9908 11549	524 593	
		372101	WASHINGTON OREGON	1 1	4 3	5958 9987	4.8 5.9	287 586	1 1	12 4	8365 10773	393 551	2 2	8906 11549	433 593	
		969254	IDAHO WASHINGTON OREGON	1 1 5	2 1 6	10055 20670 13846	3.6 3.9 3.7	376 800 495	1 1 4	18 11 18	11135 18470 12270	405 718 459	2 1	12334 12453	456 468	
		977899	IDAHO OREGON	1 7	2 13	8850 12722	4.1 3.8	361 462	1 7	22 13	11335 12193	414 453	2 2	12334 10684	456 452	
		1022955	OREGON	2	2	11315	3.4	383	2	4	12580	446	1	11074	392	
		1024870	WASHINGTON OREGON	8 7	10 12	14046 14058	3.4 3.6	481 516	8 5	31 12	12704 12713	457 463	1 1	13810 12321	496 450	
		1112760	OREGON	1	2	9945	3.7	367	1	10	9805	361				
		1148540	WASHINGTON OREGON	1 2	1 6	12900 9775	3.0 3.6	385 350	1 1	3 12	11890 9965	411 384		4	10818	390
		1183449	OREGON	1	2	10080	3.5	352	1	18	12420	492	2	11375	458	
		470345	OREGON	1	3	6947	6.5	455								
		477008	WASHINGTON OREGON	1 18	3 49	8820 9474	5.0 5.1	439 481	1 13	7 7	7463 8559	402 469	1 2	7674 9288	407 501	
		485425	OREGON	1	2	8925	4.9	436								
490289	OREGON	2	4	7284	5.0	362										
497823	IDAHO OREGON	1 3	1 4	6210 8705	5.2 5.9	320 510	1 3	10 9	7940 9205	399 478	1 1	7761 8960	391 466			
003	GUER	281407	OREGON	6	25	8851	4.2	369	4	7	8319	405	3	8538	414	
		319645	OREGON	3	11	8116	5.0	397	1	9	9201	449	5	9062	440	
		331608	OREGON	4	22	9005	5.0	441	2	8	9391	476	5	9678	497	
	JER.	394023	OREGON	3	5	8279	4.8	400								
		400065	OREGON	7	21	8293	5.6	455								
		412602	NEW YORK WASHINGTON OREGON	1 1 5	1 1 19	5380 7960 8170	6.7 5.3 5.2	361 424 413					1 2	6954 7663	402 399	
		466020	OREGON	10	27	7440	5.5	409	2	8	7938	428	1	6605	360	

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY NO.	CONTEMPORARY RECORDS NO.	MILK LB.	FAT LB.	YEARLY RECORDS NO.	HERD MILK LB.	AV. FAT LB.
001	GUER	311207	CALIFORNIA	26	38	7707	4.9	375							
		316392	CALIFORNIA	16	23	8660	5.0	429	16	11	8846	420			
		338849	CALIFORNIA	10	18	8471	4.8	394							
		346399	CALIFORNIA	26	46	7280	4.7	339							
		360264	CALIFORNIA	3	3	9287	4.5	417	3	13	7843	365			
		371743	CALIFORNIA	4	9	7145	4.8	342							
		373193	CALIFORNIA	9	16	6417	5.0	318							
		383780	CALIFORNIA	3	3	5553	4.5	253							
		406404	CALIFORNIA	5	6	7964	4.9	392	5	13	8365	403			
		407644	CALIFORNIA	5	7	7692	4.9	377	5	35	8351	411			
		412420	CALIFORNIA	1	1	4700	5.3	251							
		419948	CALIFORNIA	1	1	8280	4.8	395	1	19	8610	426			
		451712	CALIFORNIA	9	17	8095	5.0	402	9	12	8991	427			
		452950	CALIFORNIA	4	6	8640	4.5	387	4	16	8678	426			
		455329	CALIFORNIA	1	1	8040	5.3	423	1	5	8270	371			
		470690	CALIFORNIA	2	4	9638	4.2	404	2	16	9053	436			
		491025	CALIFORNIA	2	2	7955	5.2	409	2	16	8445	419			
HOL.		825106	OREGON	1	1	13130	3.4	452	1	15	12480	443	1	11118	390
			CALIFORNIA	19	40	13938	3.7	515	17	13	13439	497			
		830220	CALIFORNIA	1	2	10275	4.2	430	1	24	12855	466			
		883094	CALIFORNIA	17	30	14082	3.6	498	17	12	14032	515			
		930821	CALIFORNIA	3	8	11583	4.2	487	2	9	14090	502			
		943365	CALIFORNIA	6	13	14383	3.7	521	3	11	12791	501			
		943721	CALIFORNIA	11	29	12479	3.7	461	5	13	13734	505			
		952016	CALIFORNIA	2	4	12834	4.1	520	2	16	14207	537			
		961535	CALIFORNIA	45	68	15380	3.7	559	44	55	14678	544			
		976436	CALIFORNIA	1	1	16700	3.8	637							
		1005565	CALIFORNIA	1	2	13530	3.3	442	1	6	15425	583			
		1010937	CALIFORNIA	36	50	13453	3.7	495	35	36	14147	521			
		1062646	CALIFORNIA	4	6	10754	3.8	412	4	18	13029	502			
		1077926	CALIFORNIA	1	4	15908	3.3	527	1	15	13985	484			
		1155622	WASHINGTON	1	1	18180	3.7	664	1	39	15970	573	1	16764	600
			CALIFORNIA	13	14	15382	3.5	539	13	55	14363	539			
		1156593	CALIFORNIA	5	5	12578	4.0	499	3	24	14780	525			
		1157809	WASHINGTON	1	2	13890	3.2	443	1	36	15835	557	2	16247	570
			CALIFORNIA	1	1	12310	3.6	446	1	21	12400	478			
		1178318	CALIFORNIA	10	11	14430	3.9	561	6	26	15922	574			
		1221949	CALIFORNIA	12	12	15361	4.1	621							
		1229723	CALIFORNIA	1	1	15700	3.8	591	1	15	15210	576			
JER.		471119	OREGON	1	1	9520	5.5	520	1	24	8040	424	1	8197	432
		474901	OREGON	32	45	10187	5.3	540	7	24	8679	450	1	9129	478
		476453	CALIFORNIA	2	2	6645	5.5	350	1	1	5170	253			
		477851	CALIFORNIA	3	10	8370	5.2	440							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY HERD		
								NO. DAUS.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.
	479242	CALIFORNIA	2	2	10285	5.1	520							
	487079	CALIFORNIA	1	7	9763	4.9	480							
	498830	CALIFORNIA	6	10	11243	5.5	614	5	32	11280	595			
	536097	CALIFORNIA	3	5	13388	5.5	727	3	16	10842	558			
	560268	CALIFORNIA	1	1	10220	5.9	599	1	4	10330	522			
	565584	CALIFORNIA	4	4	11753	5.7	661	4	32	11498	597			
002 GUER	448099	INDIANA	1	1	6890	4.8	331	1	13	9800	472	1	10355	505
		UTAH	1	1	6240	4.5	281							
003 GUER	435078	CALIFORNIA	1	2	8880	4.3	381							
	445583	MASSACHUSETTS	2	6	9184	5.0	454	2	3	11172	464	2	10813	438
	453031	CALIFORNIA	1	1	7880	5.0	392							
HOL.	948233	WASHINGTON	1	1	12450	4.2	519	1	51	14950	561	1	13963	518
		CALIFORNIA	3	4	15668	3.4	528	3	158	17073	611			
	1032011	CALIFORNIA	4	5	19133	3.8	740	4	167	16875	610			
	1039201	CALIFORNIA	1	1	16730	3.7	620	1	176	17370	645			
	1050578	MARYLAND	1	5	7934	3.5	272	1	6	7592	279	5	7266	279
		CALIFORNIA	1	2	12535	3.9	485	1	57	15900	585			
	1098656	CALIFORNIA	16	18	15806	3.6	568	16	264	15585	575			
	1101105	CALIFORNIA	1	1	14770	3.7	541	1	402	15310	561			
	1108034	MARYLAND	1	2	6045	3.7	216	1	11	7590	283	2	7445	290
		CALIFORNIA	1	1	18730	3.5	647	1	354	16250	603			
	1117301	CALIFORNIA	1	2	12085	3.7	452	1	86	16010	585			
	1123091	CALIFORNIA	2	2	15560	3.4	524	2	299	14730	537			
	1146279	CALIFORNIA	1	4	20285	3.5	703	1	77	17108	601			
	1211575	CALIFORNIA	1	1	10170	4.0	404	1	197	14190	514			
	1212436	CALIFORNIA	2	2	14560	4.1	601	2	378	15785	582			
	1262351	CALIFORNIA	2	2	15460	3.6	559	2	377	15790	582			
JER.	480183	TENNESSEE	1	3	6530	5.1	333							
004 HOL.	915811	NEW YORK	2	3	10933	4.1	445	1	27	13110	490	1	13680	519
		NEW JERSEY	1	4	16740	3.8	628							
		MICHIGAN	1	2	17410	3.3	578	1	12	14575	585	1	15543	586
		WISCONSIN	1	1	15390	3.5	546	1	39	14250	521	1	12742	468
		MINNESOTA	3	3	13457	3.6	483	3	11	13323	467	1	13287	475
		IOWA	3	10	14363	3.6	507	3	16	13611	527	3	12744	536
		MARYLAND	1	5	6544	3.8	245	1	8	7200	259	4	7273	217
		CALIFORNIA	30	35	12772	3.7	474	29	32	13801	507			
	1161244	CALIFORNIA	2	4	13904	3.7	507	1	31	15470	565			
	1178325	CALIFORNIA	1	1	11660	3.9	459	1	21	13120	485			
005 GUER	345170	CALIFORNIA	2	5	10319	4.9	496	1	3	11193	545			
	359246	CALIFORNIA	7	11	9187	5.3	482	1	23	9750	483			
	438865	CALIFORNIA	1	1	4580	4.5	205							
	492761	WASHINGTON	1	1	8580	4.7	405	1	9	8320	404	1	9505	456
HOL.	886827	OREGON	1	3	16517	3.4	562	1	7	11745	543	2	11625	520
	938706	WASHINGTON	1	1	10760	3.6	387							
	1044073	CALIFORNIA	1	1	21340	3.2	685	1	133	16930	612			
	1057253	CALIFORNIA	12	12	14350	3.8	543							
	1071988	WISCONSIN	1	1	10880	4.1	443	1	24	13570	499			
		WASHINGTON	3	4	12448	4.2	526	3	10	13938	541	1	13658	535
		CALIFORNIA	5	6	13886	3.9	541	4	17	14046	520			

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY				YEARLY RECORDS NO.	HERO MILK LB.	AV. FAT LB.
									NO. OAUS.	RECORDS NO.	MILK LB.	FAT LB.			
		1077012	CALIFORNIA	16	28	15012	3.7	553	1	46	16410	580			
		1077013	OREGON	1	1	15320	3.6	550	1	2	7700	309	1	11140	438
		1077927	CALIFORNIA	4	4	15578	3.6	545							
		1090253	CALIFORNIA	1	1	18600	3.3	610							
		1109640	ILLINOIS	2	3	14588	4.0	586	2	41	12533	493	1	13854	548
			MARYLAND	6	6	12030	3.6	417	6	14	11205	415	1	11986	440
			WEST VIRGINIA	1	1	13710	3.5	483	1	44	12420	452	1	11358	412
			WASHINGTON	1	1	15110	3.7	559	1	27	15480	517	1	15293	506
			CALIFORNIA	1	1	17270	2.9	501	1	151	15660	565			
		1123249	IOAHO	35	74	13117	3.7	487	30	5	12902	461	2	11879	431
			WASHINGTON	2	4	11385	3.8	425	2	8	9905	381	2	9745	363
		1124832	CALIFORNIA	1	1	16700	3.4	563	1	98	16810	605			
		1128931	WISCONSIN	1	1	7750	3.7	284	1	6	9590	356	1	10562	382
			HAWAII	2	3	7380	3.0	202	1	29	11050	372	1	10442	342
		1128932	HAWAII	1	1	13760	3.7	515	1	28	10930	358	1	10442	342
		1128933	HAWAII	1	1	12860	3.9	497	1	28	10960	358	1	10442	342
		1195667	IOAHO	28	43	13781	3.7	513	24	17	13935	535	1	12930	499
		1195669	IOAHO	26	38	13799	4.0	552	25	19	13832	523	1	14098	535
			OREGON	1	1	15180	4.1	625	1	3	14410	483	1	14661	525
		1212343	IOAHO	18	20	14065	4.1	572	18	26	14239	552	1	13941	545
			OREGON	1	1	12360	3.3	409					1	8295	439
		1224894	IOAHO	6	6	14928	3.9	588	6	23	14353	548	1	13595	531
		1236897	IOAHO	5	5	12684	3.7	462	4	12	14218	505	1	12401	452
			WASHINGTON	3	3	13170	3.6	479	3	21	13347	487	1	13193	489
	JER.	516552	NEVADA	1	1	9330	5.7	536	1	24	10140	563			
			CALIFORNIA	8	8	9890	5.5	544							
		558463	IOAHO	11	12	9036	5.2	467	8	10	8640	466	1	8796	466
	B.S.	122242	IOAHO	3	3	10007	3.9	385	2	10	10250	430	1	11064	451
007	GUER	308050	CALIFORNIA	1	1	11130	4.3	474							
		325521	CALIFORNIA	3	3	9307	4.8	441							
		331789	CALIFORNIA	11	11	9166	4.6	414							
		348277	CALIFORNIA	4	4	7938	5.5	434							
		371744	CALIFORNIA	11	11	8686	5.3	451							
		379879	CALIFORNIA	15	15	9537	5.3	498							
		384073	CALIFORNIA	7	8	8187	5.4	437							
		392296	CALIFORNIA	2	2	8380	5.7	479							
		419924	CALIFORNIA	2	2	9850	5.0	488							
	HOL.	755530	CALIFORNIA	44	44	14045	3.6	509							
		839637	CALIFORNIA	53	55	13048	3.6	495							
		850336	CALIFORNIA	94	103	13988	3.6	503							
		855762	CALIFORNIA	41	42	14164	3.6	510							
		867753	CALIFORNIA	87	102	13853	3.8	529	2	76	17258	627			
		887103	CALIFORNIA	106	125	13494	3.8	507							
		894358	CALIFORNIA	19	19	15078	3.7	553							
		988913	CALIFORNIA	10	12	13650	4.0	550							
		1038240	CALIFORNIA	15	15	13240	3.7	485							
		1040309	CALIFORNIA	14	23	14426	3.5	504	11	74	16499	605			

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY			AV.	YEARLY		HERC	AV.	
									NO.	RECORDS NO.	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	FAT LB.		
008	JER.	1045675	CALIFORNIA	7	8	11646	4.0	456	1	2	9370	476					
		424013	CALIFORNIA	1	1	6220	5.8	361									
		446507	CALIFORNIA	3	4	9345	5.1	467									
		460018	CALIFORNIA	18	18	8359	5.4	451									
		460310	CALIFORNIA	15	15	9851	5.0	492									
		463427	CALIFORNIA	24	26	9045	5.2	467									
		492432	CALIFORNIA	5	5	9114	5.0	462									
		504681	CALIFORNIA	15	15	8869	5.4	473									
	B. S.	42637	CALIFORNIA	7	7	10584	4.6	485									
	GUER	282053	CALIFORNIA	40	75	9033	5.1	461	4	36	10658	442					
		369870	CALIFORNIA	10	26	9910	5.0	486									
		452371	CALIFORNIA	3	6	8651	4.9	419	2	19	8420	397					
		889802	CALIFORNIA	30	56	12740	3.7	470	27	114	12858	480					
		895804	CALIFORNIA	58	125	12407	4.1	507	8	66	10805	415					
926430		CALIFORNIA	40	123	13161	4.1	541	7	54	10697	415						
1013843		CALIFORNIA	5	11	11641	3.6	416	5	113	12026	446						
1050123		CALIFORNIA	48	83	12064	3.7	445	37	38	11479	445						
1098857		CALIFORNIA	1	1	17230	3.0	508	1	35	15820	581						
1138023		CALIFORNIA	2	3	17093	3.3	551	2	96	14855	531						
009	JER.	1262527	CALIFORNIA	3	3	15537	3.8	586	3	45	14867	541					
		456741	CALIFORNIA	8	9	8905	5.4	478									
		456742	CALIFORNIA	1	1	9110	5.3	486									
		461209	CALIFORNIA	5	23	8590	5.5	462									
		490119	CALIFORNIA	4	10	7796	5.7	445									
		517558	CALIFORNIA	1	2	8960	5.6	497									
	GUER	343530	CALIFORNIA	2	8	8896	4.8	419									
		387787	CALIFORNIA	1	1	7270	4.8	348									
		389400	CALIFORNIA	2	6	8477	5.3	448	1	23	13738	535					
		424296	CALIFORNIA	1	1	10640	4.3	454									
		431881	CALIFORNIA	3	5	8718	5.1	438	1	4	9055	427					
		863456	CALIFORNIA	13	23	12620	3.6	452									
	HOL.	863682	CALIFORNIA	1	5	14988	4.1	611	1	3	12090	461					
		917933	NEVADA	1	1	8220	3.8	316									
		CALIFORNIA	32	61	11756	3.6	421	2	3	14253	532						
935624		CALIFORNIA	1	1	12130	3.4	417										
965944		CALIFORNIA	1	1	11460	3.9	442										
402729		MICHIGAN	2	6	8296	5.6	459	1	9	9766	532	3	9014	494			
		CALIFORNIA	5	18	9688	5.3	511										
449437		UTAH	1	3	6820	5.5	375	1	10	7855	412	1	7619	402			
	CALIFORNIA	13	18	7216	5.4	383											
010	GUER	375896	CALIFORNIA	1	1	5050	4.9	246									
		468706	CALIFORNIA	1	1	9300	4.8	449									
	HOL.	947072	CALIFORNIA	6	7	15708	3.4	528	6	95	14554	518					
		996013	CALIFORNIA	1	1	20130	3.2	635	1	122	15840	561					

TABLE 16.--DAUGHTER-AVERAGE OF SIRE IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONT'LMPGRARY AV.				YEARLY HERO			
									NO.	RECORDS	MILK LB.	FAT LB.	RECORDS NO.	MILK LB.	AV. FAT LB.	
075	GUER	1042917	OREGON	1	1	14720	3.9	575	1	13	13520	453				
			CALIFORNIA	23	25	12875	3.7	468	23	54	12943	473				
		1241600	CALIFORNIA	1	1	12740	3.6	465	1	194	14460	517				
		415186	NEW YORK	3	6	9165	4.6	417								
			IOWA	1	1	7900	4.6	362	1	2	7090	367				
			MISSOURI	6	9	8263	5.1	418	6	7	9132	424	1	9598	441	
			NEBRASKA	2	3	7123	5.1	362	2	4	10243	423	2	8162	352	
			KANSAS	3	5	8120	5.0	401	1	15	7320	357				
			IDAHO	2	3	10130	4.5	454	1	14	9155	413	2	7870	366	
			OREGON	1	1	8650	5.1	440								
		423418	ILLINOIS	4	7	7816	4.5	353	4	10	9562	392	2	8158	321	
			WISCONSIN	14	20	7697	4.8	369	14	16	8581	399	1	9290	437	
			MINNESOTA	8	8	8161	4.8	390	6	9	9233	445	1	8915	424	
			IOWA	2	3	10170	5.0	498	2	28	10005	481	2	10718	505	
		430463	ILLINOIS	3	4	7087	4.4	310	3	8	10030	393	1	9410	359	
			MICHIGAN	1	1	7950	5.2	417	1	8	12630	490				
			WISCONSIN	29	46	8127	4.7	381	25	17	9053	413	2	9121	418	
			MINNESOTA	3	3	6763	5.1	345	3	13	10027	419	1	10086	426	
		HOL.	1102213	IDAHO	8	8	14484	3.7	528	8	18	14785	538	1	14932	540
				UTAH	4	5	15521	3.6	550	4	18	13299	483			
WASHINGTON	7			8	13502	3.6	481	6	34	14262	517	1	14326	516		
OREGON	7			8	13554	3.7	505	6	12	14871	550	1	14375	539		
	1125894	IDAHO	1	1	10530	3.7	584	1	1	9430	309	1	11194	389		
		WASHINGTON	2	2	13365	3.2	430	2	12	14905	507	1	14219	493		
		OREGON	2	2	12150	3.5	421									
JER.	445150	OHIO	1	2	9415	5.4	507	1	2	10185	497	2	10023	536		
		INDIANA	11	32	8441	5.3	438	5	6	7832	412	3	7626	398		
		ILLINOIS	1	1	10900	5.1	552									
		MICHIGAN	3	8	9862	5.2	516	2	36	9019	487	2	10050	547		
		WISCONSIN	1	2	7925	5.7	447	1	8	8295	454	2	9194	507		
		IOWA	1	3	7733	5.4	413	1	6	7397	400	3	7038	373		
		MISSOURI	2	3	5575	5.0	270	2	5	6540	336	1	7826	387		
		DELAWARE	1	1	9560	5.3	505					1	9352	456		
		MARYLAND	6	15	10785	5.8	624									
		NORTH CAROLINA	19	55	8160	5.1	412	11	11	8711	442	3	8226	420		
		GEORGIA	13	36	7884	5.0	392	3	13	7095	345	3	6997	347		
		FLORIDA	22	80	8423	5.0	424	8	31	8076	403	4	7527	367		
		TENNESSEE	1	2	8920	4.8	422									
		TEXAS	1	1	8570	4.3	369	1	21	7300	339	1	7259	342		
		IDAHO	3	7	9261	5.3	485	3	16	8541	460	1	8373	434		
		WASHINGTON	4	9	8927	5.6	501	3	18	9829	522	3	9882	528		
		OREGON	2	4	8795	5.7	500	2	26	8660	477	1	8666	452		
		449523	WASHINGTON	1	3	9473	5.3	508					1	7706	425	
		484859	WASHINGTON	10	20	10241	5.5	552	10	29	10154	533	1	10449	558	
		522990	MINNESOTA	1	5	9216	4.9	456	1	27	8190	438	1	8622	456	
IDAHO	4		4	10253	5.4	546	3	13	8460	462	1	8480	450			
UTAH	1		1	10240	5.7	587	1	7	9990	495						
NEVADA	1		1	8990	5.8	519	1	13	7830	411						
WASHINGTON	6		6	9533	5.3	498	5	23	9240	477	1	9256	502			
OREGON	6		11	9764	5.4	522	6	16	9570	517	1	8395	456			

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUD,
BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUD BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERD AV.		
								NO.	RECORDS	MILK LB.	FAT LB.	NO.	RECORDS	MILK LB.
001 HOL.	998809	PUERTO RICO	1	1	7770	3.2	247	DAUS.	NO.	LB.	LB.	NO.	LB.	LB.
007 HOL.	1017412	CALIFORNIA	11	11	11884	4.1	489							

TABLE 16.--DAUGHTER-AVERAGE OF SIRES IN SERVICE IN ARTIFICIAL BREEDING ORGANIZATIONS--GROUPED BY STUO, BY SIRE, BY STATE IN WHICH RECORDS WERE MADE

STUO	BREED	SIRE NO.	RECORDS FROM STATE	DAUGHTERS NO.	RECORDS NO.	MILK LB.	TEST PCT.	FAT LB.	305-DAY CONTEMPORARY AV.				YEARLY HERO AV.		
									NO.	RECORDS	MILK LB.	FAT LB.	NO.	MILK LB.	FAT LB.
001	HOL.	1001034	ALASKA	5	12	12426	3.5	444	4	9	13049	500			
		1021209	ALASKA	2	8	13024	3.8	488	2	4	11802	460			
		1160753	ALASKA	3	8	15250	3.8	568	3	10	12448	479			

